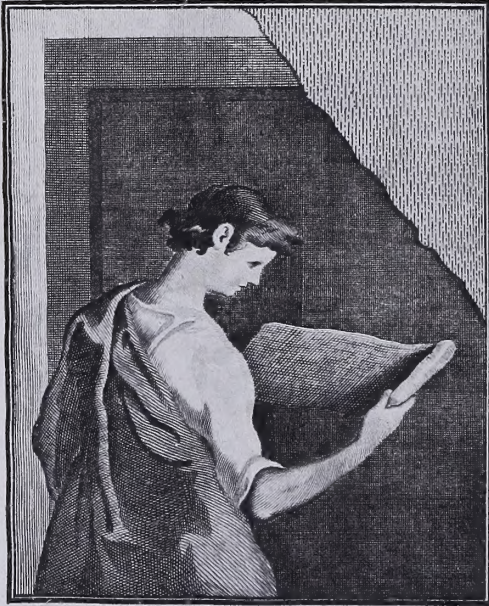


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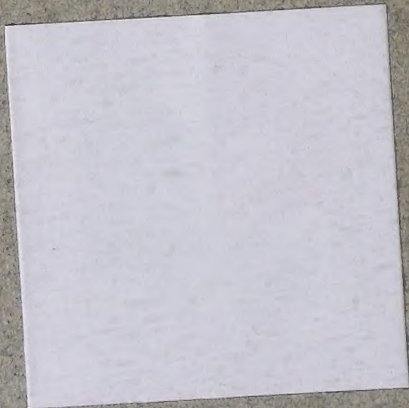
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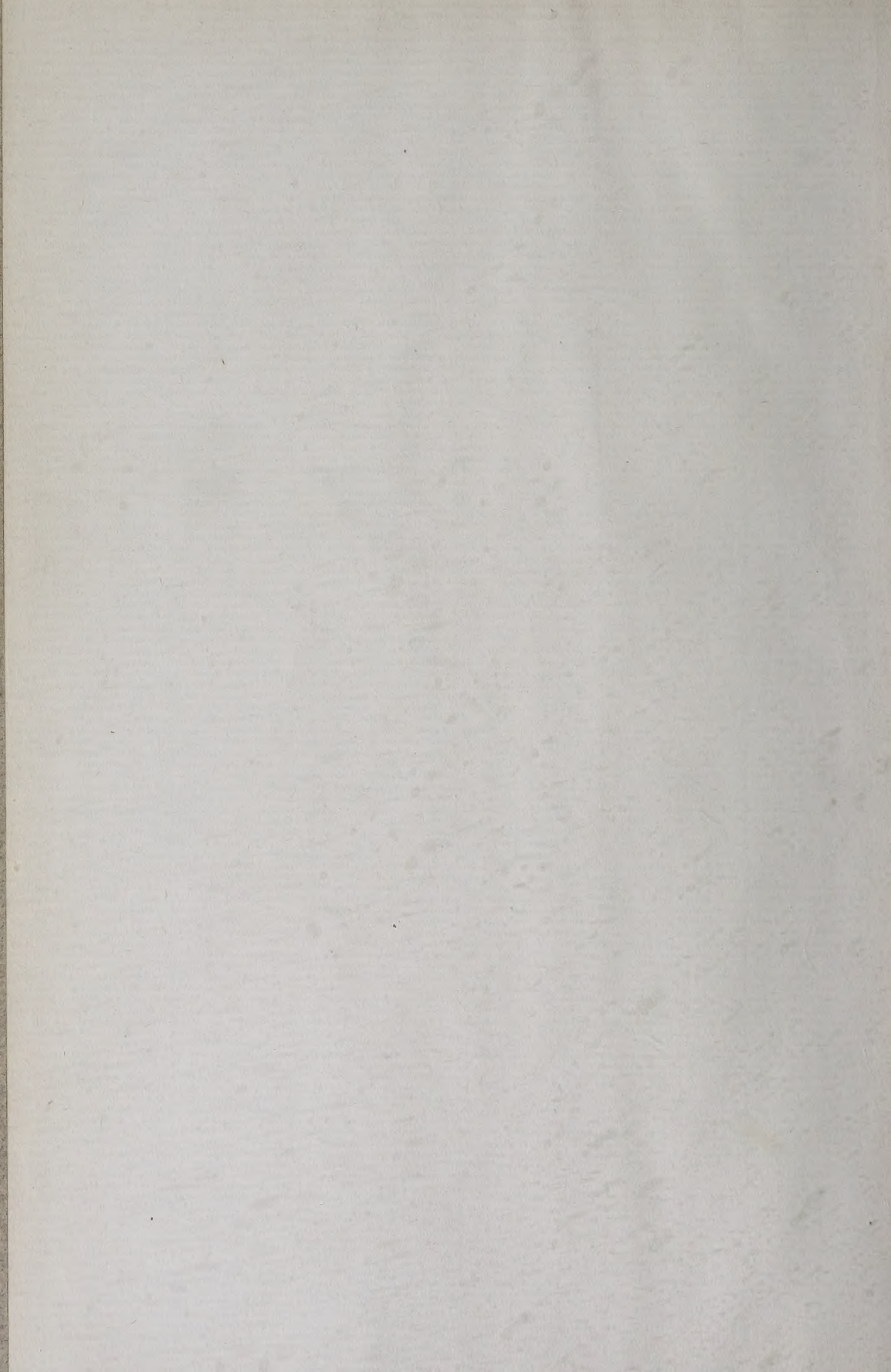
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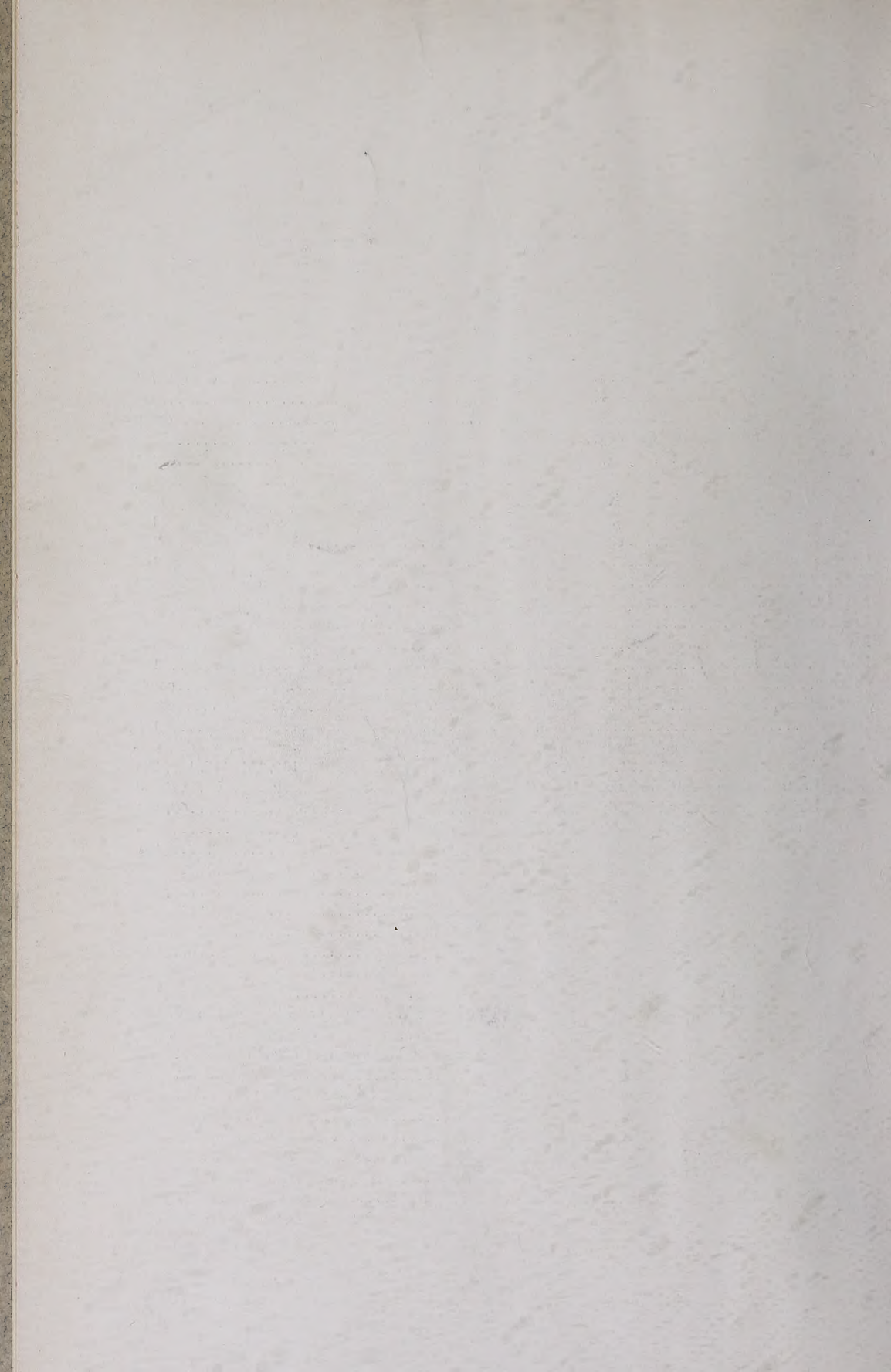
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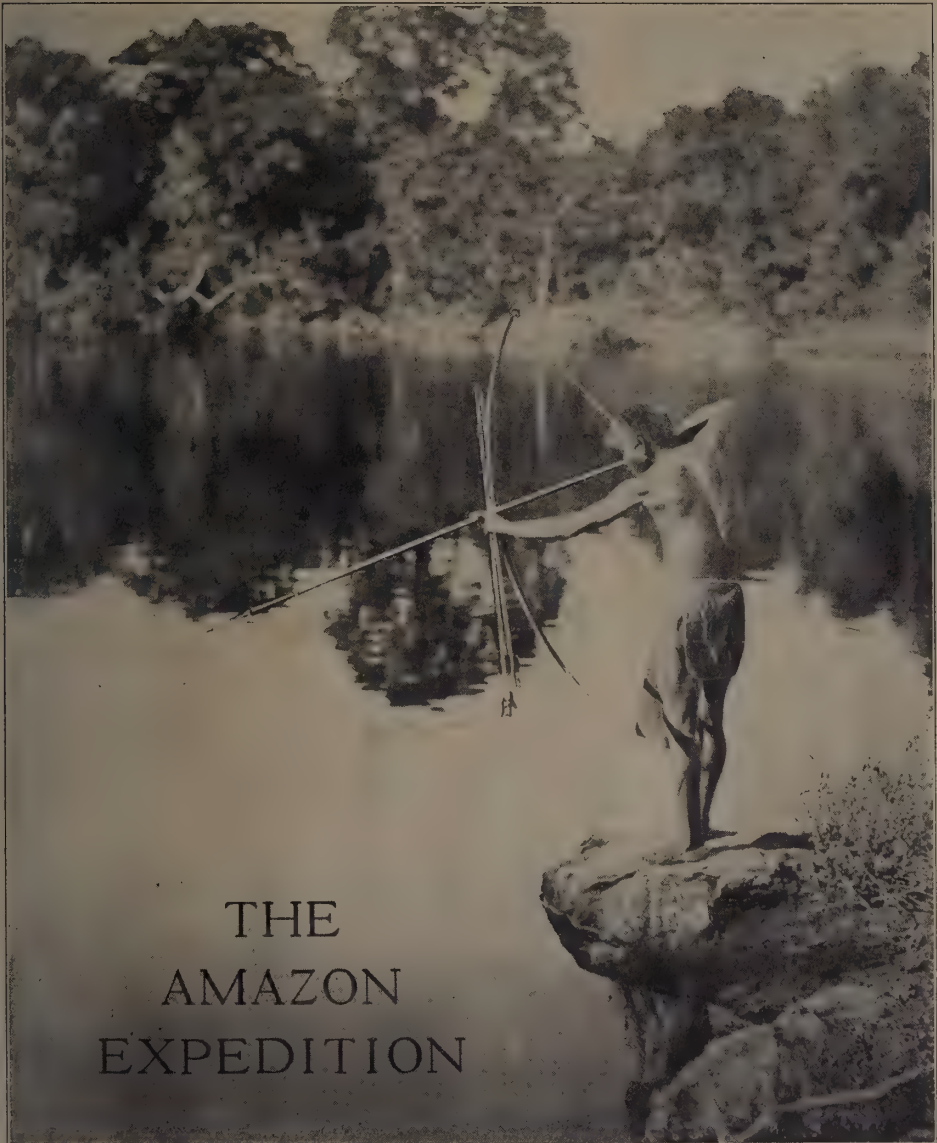
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THE MUSEUM JOURNAL

VOL. VI

PHILADELPHIA, MARCH, 1915

No. 1



THE
AMAZON
EXPEDITION

PUBLISHED QUARTERLY BY THE UNIVERSITY MUSEUM

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No. 1

THE AMAZON EXPEDITION

THE Amazon Expedition has now been nearly two years in the field. Dr. Farabee arrived in Para in June, 1913, and has since that time conducted the work of the expedition in different regions of the Amazon basin with marked success. Five shipments have arrived at the Museum containing the collections made by the expedition during its several explorations. In addition to these there have been received a large package of note-books containing records of investigations carried on among the Indian tribes encountered by the expedition, as well as a collection of over four hundred photographs, which, together with the notes and collections, present a very trustworthy record of aboriginal tribes, some of whom now for the first time become known to the world.

The first journey undertaken by Dr. Farabee was one which had for its objective point the boundaries of Venezuela and Brazil. The route traveled was by way of the Rio Negro, Rio Branco and the Rio Uraracuera. A letter from Dr. Farabee dated at Boa Vista, October 7, 1913, refers briefly to the results of this preliminary exploration:

"I have just returned from the Rio Uraracuera where we found some very good material and made some collections. We had hoped to go up this river to the Venezuelan boundary, but were unable to do so because of the numerous and dangerous falls and rapids and low water. Our guide refused to go on, saying it was impossible with present water. We went three days by canoe beyond the highest point reached by white men. I had hoped to reach the Macus and the Morongongs, but instead found remnants



FIG. 1.—Rubber worker's hut on the Amazon.



FIG. 2.—The University Museum Amazon Expedition on the Urarucura River in Brazil.



FIG. 3.—The Amazon Expedition ascending the Urarucera River in Brazil.

of three tribes, Porocotos, Ajamaras and Zaparas, and got vocabularies and photographs. We also made collections on the Majuri and found a few archæological specimens."

The next journey was made on foot with carriers into southern British Guiana in the territory of the Macusi Indians. On November 10th the party had reached Dada Nawa, at which point Dr. Farabee made the following memorandum.

"For the past twenty days we have been on foot with carriers in southern British Guiana among the Macusi Indians living in the foot-hills of the Kanaku and Pakarai ranges. As to health and physical fitness . . . in spite of a vertical sun I can make twenty-five miles a day without weariness. From Jupikari to St. Ignatius is fifty-four miles; we had to make it in two days on account of water. The second day, which was the sixteenth of our journey, we walked twenty-eight miles and got in at 4.30. The next morning at daybreak I was arranging packs for the next journey."

Dada Nawa is the residence of H. P. C. Melville, Esq., Magistrate and Protector of Indians for the whole of southern Guiana. Mr. Melville has spent twenty-four years among the Indians and speaks their language fluently. With Mr. Melville was living John Ogilvie, Esq., a native of Scotland who has been stationed for many years at this outpost of the British Empire, and who accompanied the expedition into the more remote parts of Guiana. The assistance rendered to the expedition by Mr. Melville, and by Mr. Ogilvie was of the highest possible value and contributed much to the success which attended Dr. Farabee's explorations. In his letters Dr. Farabee repeatedly makes acknowledgment of the kindness and help which he received from these gentlemen, the only white men in all southern British Guiana. He makes equally pointed reference to the extent of their knowledge of the country and of the native life and of the value of the information which they imparted to him.

It was in Mr. Melville's house at Dada Nawa that the expedition made its preparations for the adventurous journey eastward through the unknown belt of unexplored forest in southern British Guiana. When Dr. Farabee made known his purpose to Mr. Melville, the latter gave as his experienced opinion that the proposed journey was so hazardous that the chances were against his coming out alive. In short, he advised Dr. Farabee to confine his explorations to other regions. The explorer however persisted in going forward



FIG. 4.—Interior view in a Macusi dwelling in Southern British Guiana.



FIG. 5.—Interior view of a Macusi dwelling.



FIG. 6.—Macusi women in Southern British Guiana.



FIG. 7.—Macusi women in Southern British Guiana.



FIG. 8.—Macusi girls in Southern British Guiana.

and persuaded Mr. Ogilvie to accompany him. When, after six months, Dr. Farabee and his party emerged on the coast and made their way to Barbadoes where Mr. Melville himself happened to be staying for a day on his way to England, he had been so changed by the effects of the journey that he was not recognized. The detailed records of the journey from Dada Nawa eastward to the Corentyne River and down that river to its mouth have not yet been received.

A letter from Dr. Farabee, dated at Barbadoes on April 29th, gives only an outline of the journey. From November until April, he and his party, consisting of Mr. Ogilvie and four Indians, were journeying through the wilderness. Dr. Farabee's plan from the start had been to live upon the country and depend upon game and wild vegetables to supply food from day to day. For this reason it was necessary to reduce the party as much as possible. Consequently, Dr. Church, the physician on the expedition, together with all but four of the Indians, returned in January to Melville's ranch, bringing with them the records and collections obtained to that time. At that time Dr. Farabee's purpose was to push across into French territory to discover the head-waters of the Oyapok River, which enters the sea near the mouth of the Amazon from the mountains to the northwest. By descending this river the expedition proposed to reach the coast and return to Para. The following is Dr. Farabee's letter, written after he finally reached civilization after four months.

"You were, no doubt, surprised to receive my cable from Georgetown, British Guiana. We had no intention of coming out that way until we found ourselves over the divide with no medicine and little ammunition and with a twenty-eight-days' journey ahead of us across mountains to the river we had started for. It was our quickest and safest way out, so, on the 20th of March, we made woodskins (bark canoes) and started down what later proved to be the Corentyne. We thought we were on a Dutch Guiana river. I was making astronomical observations, but hadn't the nautical almanac and couldn't calculate our longitude. Of course we knew our latitude all the time. On April 17th we met a Dutch Government launch which took us to Nickerie, where we got another launch to Springsands, British Guiana. There we took motor bus to New Amsterdam and train to Georgetown, arriving April 19th.

"Our trip was most successful, with the exception of the



FIG. 2.—The highest peak of this mountain in Southern British Guiana, is the one on which according to Indian legend, the survivors of the flood took refuge.



FIG. 10.—Indian servants in Mr. Melville's house at Dada Nawa, preparing Cassava.



FIG. 11.—Mapidian women preparing Cassava in Mr. Melville's house at Dada Nawa.



FIG. 12.—Mapidian girl preparing Cassava in Mr. Melville's house at Dada Nawa.



FIG. 13.—Women preparing Cassava, Southern British Guiana.



FIG. 14.—Rapids on the Upper Essiquibo.



FIG. 15.—Taruma Indian shooting fish.



FIG. 16.—Mapidian girls weaving.

Corentyne, there being no Indians living on the river. From December 16, 1913, to April 1, 1914, we were among tribes who had never seen white men before. All these tribes were very interesting. None had ever seen matches or guns or salt or clothing. All had beads and knives; all wanted fish-hooks and many got their first ones from us.

"I made measurements of men and women, took photographs, recorded languages, etc. We visited the following tribes: Waiwai, Parikutu, Waiwē, Chikēna, Katawian, Toneyan, Diow, Kumayenas and Urukuanas. Some of them are evidently Carib stock and others Arawak stock. . . .

"You will shortly receive some good collections from this trip.

"Dr. Church, who must have gone home two months ago, has told you by letter if not in person about our trip up to the time of his return from the Waiwai country. It was necessary to reduce the party to six, four Indians, Ogilvie and myself. A larger party couldn't live on the country. The tribes live far apart, often ten or twelve days over rough mountains and on rivers. It was necessary for us to make canoes or woodskins four times after crossing mountains and reaching new rivers. Three-fourths of the time and all of the last month we had to depend upon the game and fish we could catch. Our ammunition got low, but the Indians with us used their bows and arrows well. When we got out we had two loads of shot and seventeen rifle cartridges left—a narrow margin. Sometimes we had plenty of food, often nothing; sometimes fruit and nuts, sometimes for two days nothing but alligator; sometimes nothing but the heart or head of the palm tree. The wild turkey and black monkey were our best and most abundant food. We often found birds' nests and got eggs. When not in the rapids we got fish.

"Ogilvie has been fourteen years in the bush and on many rivers and the best man I ever saw for such work, but he found here the worst falls he had ever seen. We got through by carrying woodskins scores of times over high rocks and across the land for long distances. In what are known below as the Great Falls we spent several days. It was impossible to get through; our woodskins went to pieces. We carried everything overland to the foot of the falls on the Dutch side and there to our joy we found four large canoes belonging to Balata bleeders who were deep in the forest. I took one boy and followed a trail for two days, but

found no one. This was the worst trip of my experience. Ogilvie was too weak to go. The boys looked for trees for woodskins during my absence, but found none. There was nothing else to do; we took one of the canoes, a great crime in Dutch Guiana. The next day we met some negroes going up to bleed Balata and persuaded them to take us down to the first store and to return the canoe. By traveling at night we arrived in time for the launch. We got out none too soon, as Ogilvie was having fever every night and I severe chills and fever every other night. Having fever all night and working hard all day on poor food cut us to pieces rapidly. When I left Philadelphia my weight was 193 pounds. When we reached the Dutch store it was 145 pounds. We arrived bareheaded and barefoot.

"At Georgetown, Dr. Howard, an American, treated me and now I am improving very rapidly. He wanted me to come here for a couple of months, not go home, before going back, but I will be all right in two weeks and go to Para.

"The Governor of British Guiana and Lady Edgerton entertained us at luncheon the day before I left. He had sent his aide several times after our arrival in Georgetown to inquire about our health. He is very anxious to get a copy of our geographical results, because they have nothing from southern British Guiana. I promised him that the Museum would send him a copy as soon as possible.

"Pardon me for this lengthy recital. I know many stories are afloat in Brazil and no doubt some of these have reached you."

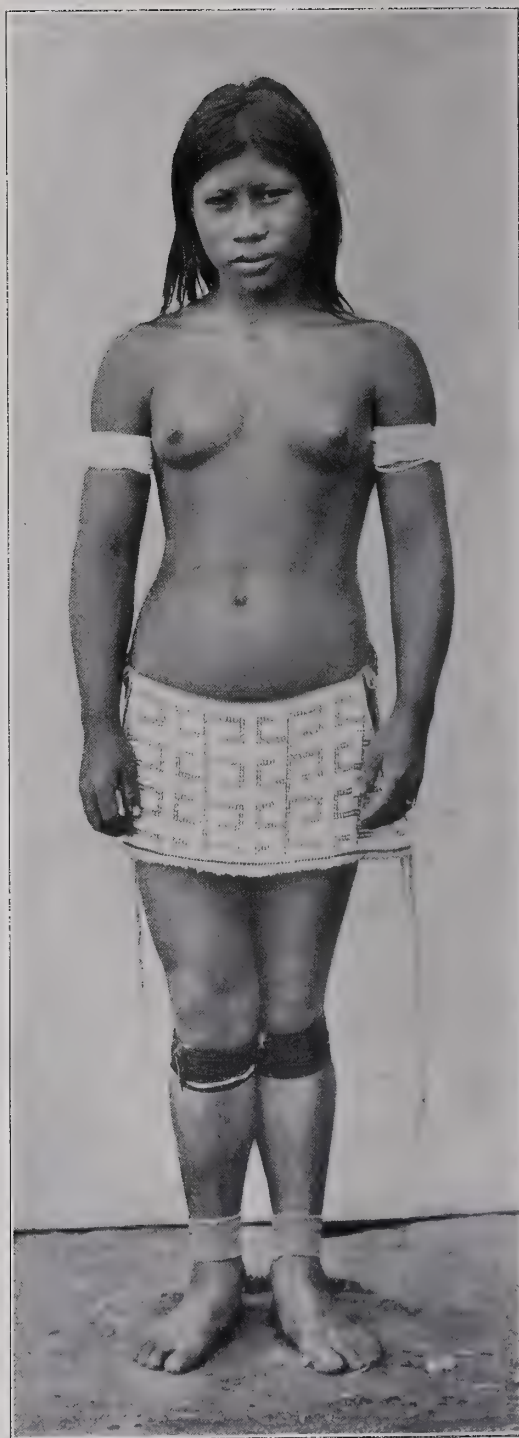
At Barbadoes Dr. Farabee recovered rapidly and in a few weeks proceeded to Para, where he made immediate preparations for his second journey. The objective point on this occasion was the upper waters of the Amazon. Leaving Para early in July, the expedition proceeded up the Ucayali River over three thousand miles from the mouth of the Amazon. Here Dr. Farabee's investigations were directed to the tribes who live along the banks of these upper streams. Among the collections which he was successful in bringing out was a large consignment of the decorated pottery made by the Conebo tribe. From these explorations Dr. Farabee returned to Para in October of 1914. From the first of November of that year until the middle of February, 1915, he was engaged in conducting archæological investigations on the Island of Marajo in the mouth of the Amazon River. Early in March he again set out



FIG. 17.—Mapidian man shooting fish.



FIG. 18.—Mapidian girl.



FIGS. 19 and 20.—Two portraits of a Mapidian girl.



FIG. 21.—Mapidian women grating Cassava.



FIG. 22.—Dr. Farabee's party on the Caduwini River.



FIG. 23.—An Indian village in Southern British Guiana. From the middle of December, 1913, till the first of April, 1914, the Expedition was among tribes who had never before seen white men.



FIG. 24.—Natives of Southern British Guiana.



FIG. 25.—An Indian dwelling in the heart of the Guiana forest. Beside it is a hut prepared for the visitors.



FIG. 26.—An Anaconda. These creatures are sacred to the Indians in Southern British Guiana.

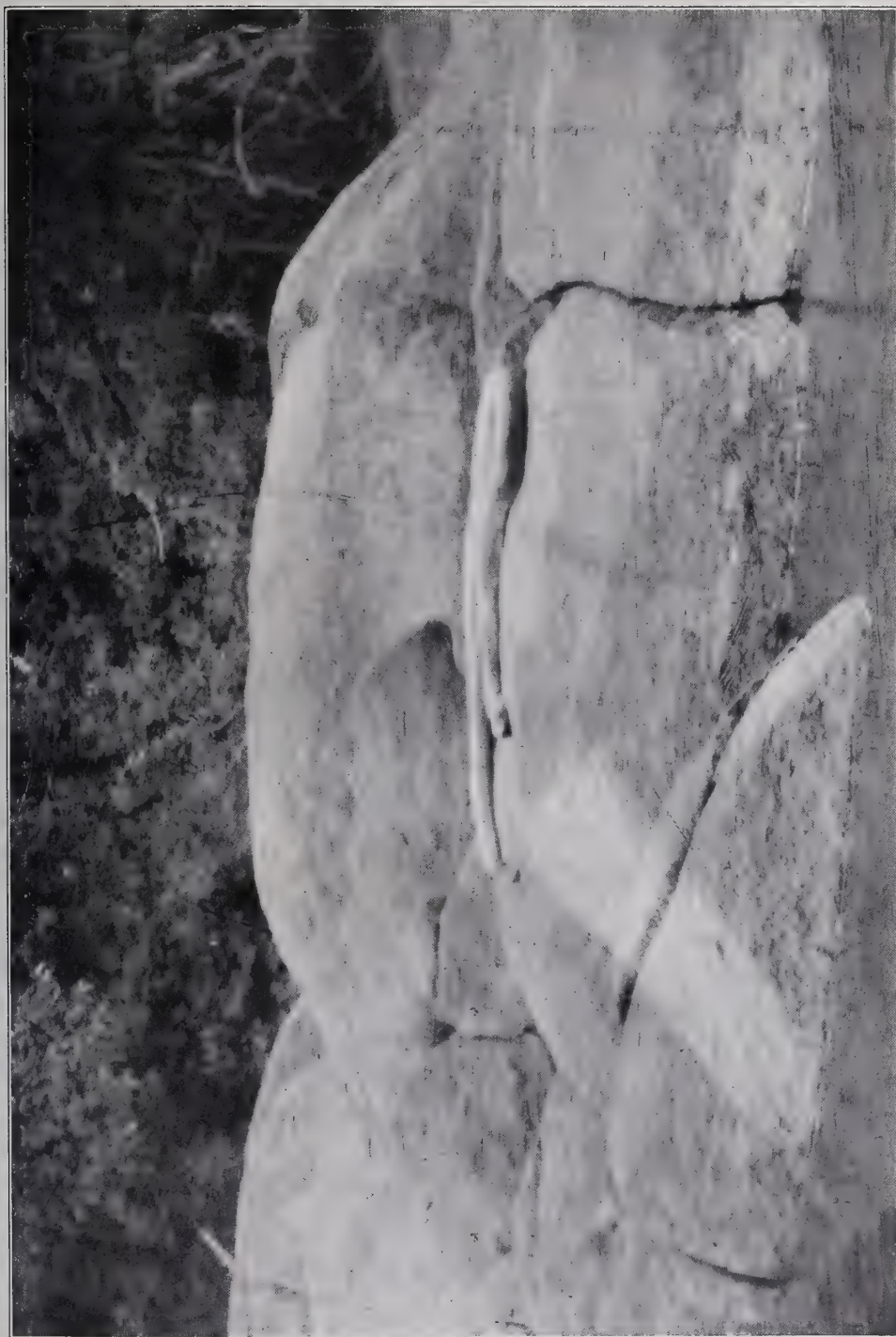


FIG. 27.—An Anaconda on the river bank.

for the upper Amazon on a journey from which he will not return till July. He will ascend the Alta-Purus River, on which he plans to remain for three months, about the frontiers of Brazil, Bolivia and Peru. He will then proceed over the divide to the headwaters of the Tahuananu and descend the Rio Beni into the Madeira and thence back to Para by way of the Amazon.

In this short mention of the work of the Amazon Expedition it has not been our intention to give more than a mere outline of the itinerary during the last two years, and we can touch only briefly on the results attained. The larger and more important scientific results can only be worked out by Dr. Farabee after his return from the field. From every tribe visited extensive data have been collected relative to every aspect of their culture. Photographs and physical measurements have also been obtained. The investigation made by Dr. Farabee with reference to the languages spoken by the tribes which he encountered will contribute much toward a definite determination of linguistic relationships in South America and afford a basis for scientific classification.

The following observations are derived from the expedition's note-books which have been received at the Museum and which refer to the newly studied tribes of southern British Guiana mentioned in Dr. Farabee's letter of April 29th.

Cassava forms the staple food product of all the tribes of southern British Guiana and the cultivation of this article is the only form of agriculture; this diet is supplemented by hunting and fishing. Dr. Farabee's letter of April 29th relating how he and his companions lived for five months in the forest, gives a good idea of the kind of wild animals and plants which help to make up the food supply of the natives. The methods of hunting and fishing are also clearly indicated in this letter and in the photographs which are published in these pages. The bow and arrow are extensively used for taking fish as well as birds and other animals. Another method used for obtaining fish is described in some of the note-books and consists in the well-known device of throwing into the streams the juices of certain plants which stupify the fish and bring them to the surface.

In addition to the animals mentioned in his letters it appears from Dr. Farabee's note-books that snakes of great size were frequently encountered. At one place he writes that he saw from the canoe an enormous anaconda on the rocks as large as his body.

A few days later he writes: "Today I saw another large anaconda about sixteen feet long and got a photograph of it, but did not kill it because these creatures are sacred to the Turumas and Wapisianas."

The health of the natives is excellent. It would seem that none of the diseases familiar among civilized people have reached the tribes of southern Guiana. Tuberculosis, pneumonia and venereal diseases are alike unknown. Men and women bathe regularly from two to three times a day, using a bamboo scraper to scrape themselves after the bath.

Inbreeding, with certain restrictions, seems to be favored. Brothers and sisters may not marry. On the other hand, it is not only regular but customary for a boy or girl to marry his or her father's sister's child or mother's brother's child, but may not marry the father's brother's children or the mother's sister's children.

The curious custom of the *couvade** prevails; that is to say, when a child is born among the Waiwai, for example, the father takes to his hammock and remains there for a month. During this time he refrains from all strong foods and the women bring him such delicacies as he is permitted to eat and wait upon him as an invalid. Meantime, the mother of the child goes about her work.

The following Creation story is recorded by Dr. Farabee as found among at least one of the tribes of southern British Guiana.

THE CREATION

In the beginning there were two gods, Tuminkar and his brother Duwid. It was Tuminkar that created men and women and afterwards the other animals. It was Duwid who brought men and women food. Day after day he brought fruits and vegetables in great variety and profusion for them to eat, so they were grateful to Duwid and rendered him thanks. Having nothing to do, the first men and women amused themselves by watching the animals. They soon noticed that these were in the habit of passing in one

* *Couvade*, from the French word *couver*, to hatch. The same custom is mentioned by several of the classical writers, among others by Strabo, who observed it among the Basques. References to the *couvade* are found in the medieval writings of Europe, as in the twelfth century romance of *Aucassin et Nicolette* where the custom is described. Marco Polo records that he found it in Chinese Turkestan and it has since been recorded by different observers in China, India, Africa, and at certain points in North America as well as in South America. In modern Europe it is said to survive in one form or another among the Basques, the Bretons and in the Baltic provinces of Russia. Traces of it are even to be found in the rural districts of England.



FIG. 28.—Dr. Farabee's camp in the heart of the Guiana forest. Often it took the party twelve days' travel through forest like this to pass from one native village to another.



FIG. 29.—The man on the left is the Waiwai Chief; the one on the right is the Parikutu Chief. (See also Figs. 41 and 42.)



FIG. 30.—Waivai family in their hammocks.



FIG. 31.—Waiwai men.



FIG. 32.—Two Waiwai men.



FIG. 33.—Two Waiwai girls decorated for the dance.



FIG. 34.—Waiwai man in dancing costume, front view.



FIG. 35.—Waiwai man in dancing costume, side view.



FIG. 36.—Waiwai man in dancing costume, back view.



FIG. 37.—Waiwai Indians in a dance.

direction in the morning of each day and returning in the opposite direction in the evening, so they said to themselves: "Let us go with the animals and see where they go and what they do." So they followed and came with the animals to a great tree bearing on its branches all kinds of fruits and vegetables. On the ground under the tree lay great quantities of these fruits and vegetables upon which the animals fed each day, and there was plenty for all; so the men and women also took and ate, then they said among themselves: "This is where the god Duwid gets our food. Let us, hereafter, come and get it for ourselves, then we will not have to thank the god for it." Next day, therefore, they told Duwid that he need not trouble himself to bring them food any more, for they knew where to get it themselves. "It shall be as you wish," replied Duwid, "but henceforth you will have to work to obtain food to eat. Tomorrow the tree will be cut down, but in order that you may not starve utterly I will tell you this. If you will break off a branch bearing each kind of fruit and plant this in the ground and water it carefully every day and cultivate it and protect it, it will grow and bear fruit each in season and each after its own kind. Then you may plant the seeds that are in the fruit and they in their turn will grow and produce, each after its kind. Thus you may continue to eat of the fruit of the tree, but you will have to work for it."

Following the instructions of Duwid, the first men proceeded to break off branches of the great tree and to plant them, selecting those which bore the different kinds of fruit and vegetables. Presently, however, they grew tired of the labor and stopped; hence when the tree was cut down only a few of the many varieties of food which it bore had been saved for mankind. Consequently there are today not many kinds of edible plants in the world, whereas if the first people had been more industrious these would be found in greater plenty. Moreover, to this day it is necessary to work hard in order to make the cassava grow.

The stump of the tree remains to this day. It is pointed out in the form of a steep rock which indeed resembles the trunk of a great tree.*

* Rev. W. H. Brett mentions a creation myth having features in common with this one, which he found among the Acawai Indians of northern British Guiana.—*The Indian Tales of Guiana*.

HOW THE MONKEY DECEIVED THE CREATOR AND PLAYED A TRICK ON THE TAPIR

Another story which does not seem to be entirely in accord with the first, says that after Tuminkar had created men he proceeded to create the animals.

As each animal was created he was given his proper form, size, color, voice and call and was then asked where he would prefer to live and what he would prefer to eat. The first animal created was the jaguar. When he was asked where he would live and what he would eat, he looked about and saw the trees and the men. He said: "I prefer to live on the ground and to eat men." He was allowed his choice.

The second animal created was the monkey. When he was asked where he would live and what he would eat, he looked around and saw the jaguar and replied: "I do not like the look of the fellow on the ground. I shall live in the trees and eat fruits." So he was allowed his choice.

The third animal created was the tapir. While he was being finished the monkey was looking on from the branches of a tree. He said to himself: "Now if that fellow should choose to live up here in the trees he will be a great nuisance. He is so clumsy that he will always be in my way and he is so heavy that he will break down the trees. He really ought to live on the ground, but I can see well enough that he will not want to live with the jaguar." As he said this, the monkey climbed down to the ground and when Tuminkar asked the tapir where he would like to live and what he would like to eat, the monkey whispered in the tapir's ear, "Don't say anything." So the tapir was silent. The Creator repeated his question and again the monkey whispered in the tapir's ear, "Don't answer" and again he was silent.

Thereupon, Tuminkar said to the tapir, "You seem to be a very stupid fellow. Go and get your living wherever you can and eat whatever you can get." Therefore, to this day the tapir is silent and though he lives on the ground, he eats the leaves of the trees which he pulls down with his long nose.

TUMINKAR'S SON

Tuminkar, the god, had a son named Tuminkardan. A time came when Tuminkar had a great fight with a certain giant Bowkur,



FIG. 38.—Waiwai pig trap.



FIG. 39.—Preparing the cotton for spinning.



FIG. 40.—Spinning cotton.



FIG. 41.—Ufono, Chief of the Parikutu.



FIG. 42.—Ufono, the Parikutu Chief.



FIG. 43.—A Parikutu man with painted decoration.



FIG. 44.—Two brothers, Parikutu Indians.

who lived upon the earth. During the war that was waged between these two, Tuminkar's son was killed. The god fought with thunder and lightning and Bowkur fought with bow and arrows. The giant was eventually defeated and driven from the earth and fastened in the sky so that he might not return. He is the constellation Orion. He shoots an occasional arrow at Tuminkar. These arrows are the meteors sometimes seen shooting across the sky.

Beyond the Karawaimin Mountains is a great white rock. Under this rock Tuminkar buried his son and left the earth to live in the sky. Before going, however, he told the people that when



FIG. 45.—Canoe of the Expedition ascending one of the rivers in British Guiana.

the great rock beyond the Karawaimin Mountains wears away, his son will come forth and be their leader, teacher and friend. At the beginning men were given all knowledge, but since that time most of it has been lost. At the coming of Tuminkar's son, whom the Indians expect, he will teach them once more the things they have forgotten.

Dr. Farabee has also recorded a flood myth obtained from the same Indians.

The archaeological investigation in southern British Guiana establishes the fact that urn-burial was formerly in vogue, a custom not known among the present inhabitants. Several of these urn burials have been received in the Museum. As was to be expected,

archæological remains in the lower Amazon basin and the adjoining territory in Guiana are not numerous. The importance attaching to the discovery just mentioned is that it indicates that the Macusi, on whose territory the discovery was made, superseded another people of unknown identity possessing customs unknown among the Macusi and their neighbors.

It has long been known that on the Island of Marajo at the mouth of the Amazon there existed abundant archæological evidence of an extinct native population and a culture development which appears to have been local. This evidence consists in large mounds of earth and other deposits containing richly decorated pottery. During his four months' exploration on this island of Marajo, Dr. Farabee has obtained important results bearing on the ancient inhabitants who lived formerly in the Amazon delta.

The explorations in the Alto-Ucuyali region, at the head of the Amazon system, though confined almost entirely to the territories immediately adjoining the streams, produced an abundance of material for the study of an important group of little known tribes. Among the collections obtained from these tribes the most striking is the decorated pottery, the manufacture of which forms an important industry at the present time and furnishes an article of exchange in the trade relations existing between the various tribes.

A description of this pottery is reserved for the next number of the JOURNAL.

KINGS BEFORE THE FLOOD

AMONG the valuable texts published by Dr. Poebel in Volume V of the Publications of the Babylonian Section of the Museum there is a list of long-lived kings. Their names and the lengths of their reigns are as follows.

Galumum: reigned 900 years.

Zugagib: reigned 840 years.

Aripī* (or Ademe), son of Mashgag: 720 years.

Etana, the shepherd, who went to heaven, who subdued all lands: reigned 635 years.

Pilikam: reigned 350 years.

Enmenunna: reigned 611 years.

Melamkish: reigned 900 years.

Barsalnunna: reigned 1200 years.

Meskingashir: reigned 325 years.

Enmeirgan†: reigned 420 years.

Lugalbanda: reigned 1200 years.

Dumuzi: reigned 100 years.

Gilgamesh: reigned 126 years.

In addition to these the name Mes(?)zamu appears, but the number of his years is lost.

The lengths of the reigns of these kings at once suggest the lengths of the lives of the antediluvian patriarchs in the Fifth Chapter of Genesis. Dr. Poebel in his important volume of Historical Texts treats these kings as kings who lived after the flood, regarding them as distinct from the patriarchs of Genesis and the antediluvian kings of Berossos. While this view may be right, another view is possible, and seems to me more probable. The summary at the end of the longer king-list published by Dr. Poebel betrays no consciousness that life upon the earth had been interrupted by a flood. The writer appears to have thought that he was tracing Babylonian kings from the beginning of time. More-

* Dr. Poebel reads the first sign *Ar*, but in one tablet both the photograph and his copy suggest the reading given above, though the tablet itself is so crumbled that the original writing cannot in any way be determined from it. In a second copy in the Museum published by Dr. Poebel as Number 3, the beginning of the name has also been erased from the tablet.

† Dr. Poebel reads Enmeirkar, but the last sign has both the values *kar* and *gan*.

over, the names of a number of these kings when translated from Sumerian into Semitic have the same meanings as names which occur in the Fifth Chapter of Genesis. Thus Enmenunna means "*exalted man*," in Semitic, Mutu-elū, or translated in one word, Amelu. Enosh in the Fifth Chapter of Genesis means also *man*. Again Pilikam translated into Semitic becomes Ina-uzni-erešu meaning, *with intelligence to build* or in one word, *artificer*. Kenan of the Hebrew list means also "*artificer*." Dumuzi of the Sumerian, when translated into Semitic, becomes Apal-napisti or *son of life*. Jared of the Fifth Chapter of Genesis means *descendant*. In these names the book of Genesis gives in Hebrew the same meaning that the Sumerian bears. Three other names of the Fifth Chapter of Genesis appear to be Hebrew corruptions of translations of these Sumerian names into Semitic Babylonian: thus Barsalnunna becomes in Semitic Babylonian, *Šibu-elū* of which *Seth* is the Hebrew form of the first syllable. Enmeirgan becomes in Semitic Babylonian *Mutu-šalal-gan* of which Mahalalel might well be a corruption. Meskingashir becomes *Mutu-ša-etu* or *elū* with which Methusalah is almost identical. Naturally one looks for Enoch in the person of Etana, the shepherd who went to heaven, and there are two possible ways in which the name Enoch might become attached to Etana. In Sumerian the words *to heaven* are *an-shu*. This *shu* is also sometimes pronounced *ku*. If pronounced by a Semite Anku, Enoch becomes a natural Hebrew corruption of it. Dr. Poebel has, however, supposed that the equivalent of Enoch in the list of Berossos is a corruption of the name Enmeduranki, a king of Sippar, who is said in a ritual text to have first learned the method of taking omens from oil poured on water. Enmeduranki means in Sumerian, *the hero who binds together heaven and earth*. In the early dynastic tablets, the kings of Kish and of Sippar, or Agade, are the same. Etana is in our tablet said to be a king of Kish. As he went to heaven, it is probable that he may have been called the hero who binds together heaven and earth. If thus we derive the name Enoch from Anki, the last two syllables of the Sumerian name Enmeduranki, we are probably deriving it from an epithet of Etana. Both the name and the character of Etana therefore, correspond to those of Enoch.

Again the name Aripī might be read Ademe, and possibly was so read by the Sumerians themselves. Ademe is almost identical in sound with the Hebrew Adam. Lamech may possibly be

a corruption of Melamkish. If the first and last letters of the Sumerian were away Melamkish would become Lamech. Langdon has, however, suggested that Lamech is the Sumerian deity Lumga whose symbol in Sumerian is that of the carpenter. It is possible that the name of Lumga may have been combined with a corruption of *Melamkish*. This seems all the more probable since in the Fourth Chapter of Genesis Lamech is said to have been the ancestor of workers in metal, the inventors of music and of other arts of civilization.

When now we combine the evidence of the similarity of the names with the similarity of the ages of the antediluvian patriarchs to the lengths of the reigns of these old Babylonian kings, it seems highly probable that the list of kings was the source from which the names of the patriarchs were originally derived. To this it may naturally be objected that the number of the names of the Babylonian kings recorded in the tablet is greater than the number of antediluvian patriarchs, although the tablet is broken and the names which it originally contained were considerably larger than those which we can now read. This objection, however, is not as significant as it first appears, for there is evidence that the biblical writers employed a method of selection. For example, the names which fill the first nine chapters of the first book of Chronicles are derived from the earlier books of the Old Testament, but those chapters of Chronicles are formed by selecting names here and there from the earlier books without copying all which those books contained. Again, in the genealogy of Jesus in the First Chapter of the Gospel of Matthew, three of Israel's kings are omitted, namely Ahaziah, Joash and Amaziah. It may well be, therefore, that the names in the Fifth Chapter of Genesis were selected from a Babylonian list without taking all that that list contained.

It has long been recognized by critical scholars that the names of the descendants of Cain in the Fourth Chapter of Genesis are identical with the names of the descendants of Seth in the Fifth Chapter. Naturally, therefore, it can be shown that the names of the descendants of Cain can also be derived from our list of Babylonian kings. It can also be shown that the majority of the names in the list of Berossos were taken from this same source.*

*The writer is publishing an exhaustive treatment of the subject in the *Journal of Biblical Literature*.

As we compare the three lists of names which seem to be dependent upon this Babylonian source, the following differences may be traced. In Genesis IV the only names added to those derived from the Babylonian list are the names of the three sons of Lamech: Jabal, Jubal, and Tubal and of his daughter, Naami. These four names are all allegorical names descriptive of the pleasure derived from civilizing inventions. They all originated in Hebrew so that it is clear that the author of the Fourth Chapter of Genesis employed no Babylonian name after Lamech. The author of this chapter made no use of the large numbers of years which the Babylonian kings are said to have reigned. Modern scholars attribute the Fourth Chapter of Genesis to a writer who, like the author of the Babylonian king list, betrays no consciousness that the life of the world had been interrupted by a flood.

The author of the Fifth Chapter of Genesis shows in other parts of his work that he was greatly interested in the length of time that different people lived. He, therefore, taking a suggestion from the large number of years attached to the reigns of the Babylonian kings, gives us the great ages of the antediluvian patriarchs. He also embodied in the document the account of the flood and he consequently adds to the list of patriarchal names derived from the Babylonian tablet, the name of the hero of the flood, Noah, who is identical with Ut-napishtim and Ziugiddu who in Babylonian sources was the hero of the flood. The name of this hero is not, however, found in the names of the Babylonian list of kings.

Berossos, who lived in the third century B.C., has gone in two respects a step further. He not only has the name of the hero of the deluge but he has substituted for the name Lamech Ubaratutu, the name of Ut-napishtim's father. He also increased the lengths of the reigns of the kings who ruled, he says, before the deluge from the mere hundreds of years assigned to them in the Babylonian king list to tens of thousands of years each, so that he makes the time covered by the reigns of ten monarchs 432,000 years.

It will thus be seen that if the views set forth in this note are tenable, this tablet from Nippur is a very interesting and important source both for the Old Testament and for the traditions embodied in Berossos.

GEORGE A. BARTON.

NOTES

Mr. John S. Newbold has been elected on the Board of Managers to fill the vacancy caused by the resignation of Mr. B. Talbot B. Hyde.

Mr. B. W. Merwin has been appointed Assistant Curator of the American Section of the Museum.

A small collection of rare old ornaments from Samoa, British New Guinea and Hawaii have recently been added by purchase to the collections representing the peoples inhabiting these islands. The carvings and braided fibre objects in this collection illustrate arts which were highly developed, but which have now become extinct.

The Chinese collections have been augmented by the following acquisitions purchased since the beginning of the year.

A pair of large stone Fu-lions from the entrance to a Chinese temple and dating from the early Ming Dynasty.

A pair of large famille verte palace jars (Kang-hsi).

One cloisonné vase from the Arthur I. Hoe Collection.

One large bronze drum of the Han Dynasty.

A boat-shaped bronze bowl embellished with dragons in relief on either side. This piece is dated in the Sung dynasty.

Two very rare Tibetan images have recently been acquired by purchase. These excellent examples of the religious art in Tibet are cast in bronze which is afterwards worked by hand and very heavily gilt.

A small but interesting collection of weapons from the South Pacific, from India and from North Africa has been presented to the Museum by Mrs. William Pepper through her son, Dr. William Pepper. Mrs. Pepper has also presented a piece of Serbian embroidery.

The Eckley Brinton Coxe, Jr., Expedition to Egypt began work early in the year on the great cemetery at Giza at the base of the second pyramid. Several important pieces of sculpture were dis-

covered, including an offering table containing an inscription giving the names of the builders of the first and second pyramids, together with the name of another king of the fourth dynasty of whom nothing is known.

Mr. Fisher, the chief of the expedition, also made a trip into the Sudan, where he spent five weeks making maps. In the meantime, the Egyptian Government granted the Museum a concession for excavating the site of Memphis. The part of the ancient city which will be excavated by the expedition is that part which includes the site of the Royal Palace of the New Empire. Work was begun on this site early in March and will be carried on by Mr. Fisher with a full force of workmen as late into the summer as the climate will permit.

Mr. C. W. Bishop arrived in Japan early in March. He has been occupied since then in travelling throughout the Empire, visiting the various temples and studying the various public and private collections to which he has had access through the courtesy of both the Japanese officials and the owners of important collections.

Mr. George G. Heye has continued his archæological investigations in the West Indies. Mr. M. R. Harrington has made excavations in a number of caves and village sites in the east end of Cuba. These sites have yielded an abundance of pottery, stone celts, rude implements of flint and of shell, wooden dishes and the remains of a wooden seat. The excavations have also brought to light artificially deformed skulls.

Prof. George A. Barton of Bryn Mawr College has continued his work upon the collection of Babylonian tablets in the Museum. His volume on the administrative documents of the earliest periods has just been published as Volume IX, No. 1, of the Babylonian Series.

Miss Adela C. Breton has been at the Museum since Christmas studying Central American MSS. in the Brinton Collection.

The collections in the Mediterranean Section have been recatalogued and the exhibits have been entirely rearranged in the cases by Dr. Edith H. Hall, the Assistant Curator of the section. These exhibitions are now properly displayed and their usefulness has been greatly increased both for students of Græco-Roman archæology and for visitors to the Museum generally.

A great deal of attention has been attracted by statements made in the public press relative to some missing laws of the Hammurabi Code which have been discovered on a tablet in the Museum. Many inquiries have been received relative to this discovery. In answer to these inquiries the following statement is made.

In the volume entitled "Historical and Grammatical Texts," by Dr. Arno Poebel, published as Volume V of the Babylonian Series of the Museum, there is included a large tablet in many fragments which contains a number of the laws of Hammurabi. Dr. Poebel's translation of this tablet was not ready when the volume went to press and consequently this translation has not been published. In the JOURNAL for June, 1913, Dr. Poebel already announced this discovery and stated the fact that among the laws preserved on the tablet are two which are missing from the code as it is preserved on the great stela in the Louvre. These are the two laws to which special interest attaches at the present time. Dr. George A. Barton has furnished the literal translation of each of these laws. The first refers to debt and reads as follows.

"If a man borrow grain or money from a merchant and for the payment has no grain or money, whatever is in his hand in the presence of the elders he shall give to the merchant in place of the debt. The merchant shall not refuse it; he shall receive it."

The second law refers to partnership and reads as follows.

"If a man give money to a man for a partnership, the gain and profit that accrue is before the gods, together they shall do business."

UNIVERSITY OF PENNSYLVANIA

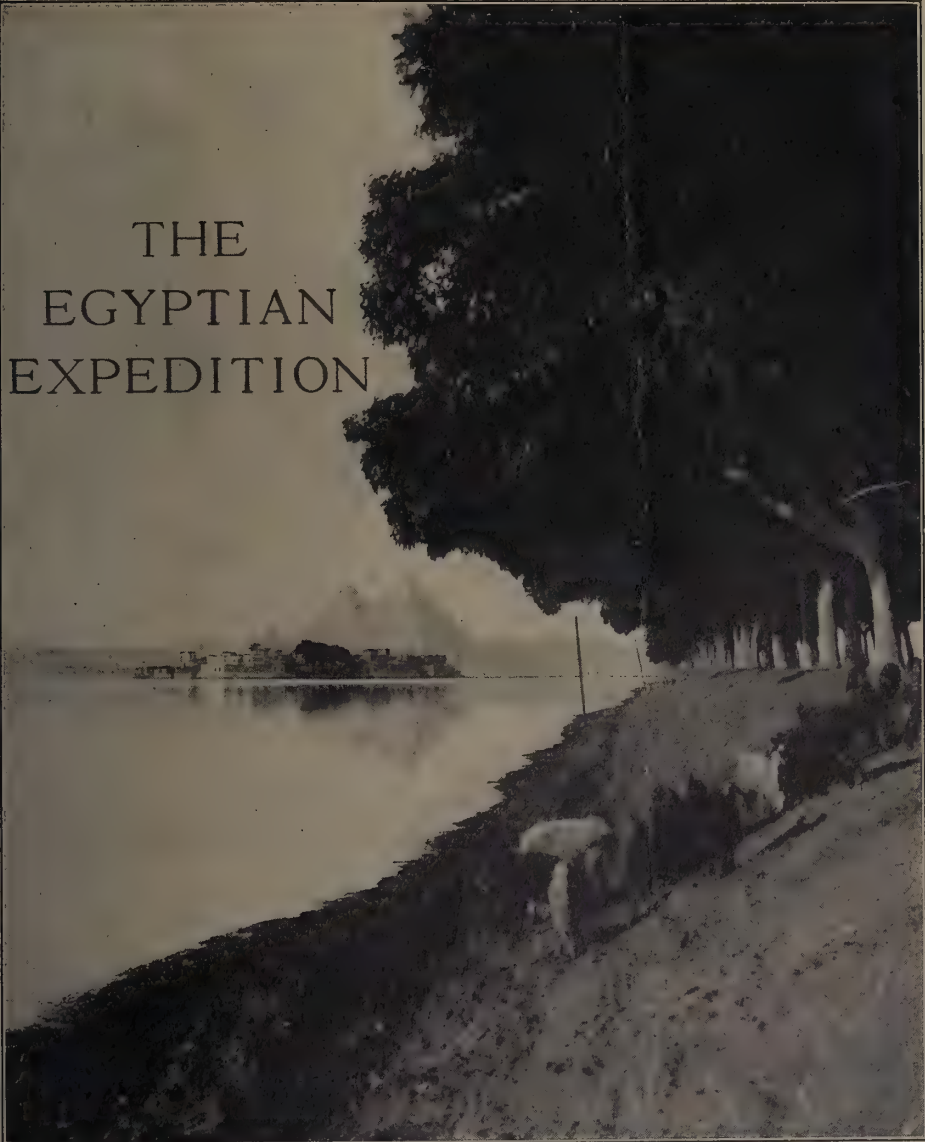
THE MUSEUM JOURNAL

VOL. VI

PHILADELPHIA, JUNE, 1915

No. 2

THE EGYPTIAN EXPEDITION



PUBLISHED QUARTERLY BY THE UNIVERSITY MUSEUM

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THE MUSEUM JOURNAL

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THE ECKLEY B. COXE, JR. EGYPTIAN EXPEDITION

MR. CLARENCE S. FISHER, Curator of the Egyptian Section of the Museum, arrived in Egypt on December 16, 1914. On that day, as it happened, Egypt became a Protectorate of the British Empire. Mr. Fisher found that the country was quiet. Most of the archæological concessionaries had withdrawn from their excavations and in consequence laborers, many of whom had experience in excavating, were plentiful. The conditions were in all respects favorable for an expedition equipped to conduct excavations on the sites of one or more of the ancient Egyptian cities. The organization of the Eckley B. Coxe, Jr. Expedition was therefore completed under the patronage of the President of the Museum to carry on systematic excavations, subject to arrangement with the Egyptian Government.

The first step to be taken was to secure through the Department of Antiquities of the Egyptian Government a site that would yield the results which the Museum was most desirous of obtaining. Mr. Fisher spent a month in preliminary examination of various sites in the Delta and in lower Egypt. For various reasons the choice of sites fell upon the following three. Tanis in the western Delta, a city dating from the sixth dynasty to the Roman Period; the pyramid fields at Gizeh, containing the great royal cemeteries of the fourth and fifth dynasties; and ancient Memphis, situated on the west bank of the Nile and dating from the earliest prehistoric times to the Arab invasion.

Tanis had, a year before Mr. Fisher's arrival in Egypt, been divided between a French expedition and an Austrian expedition, but

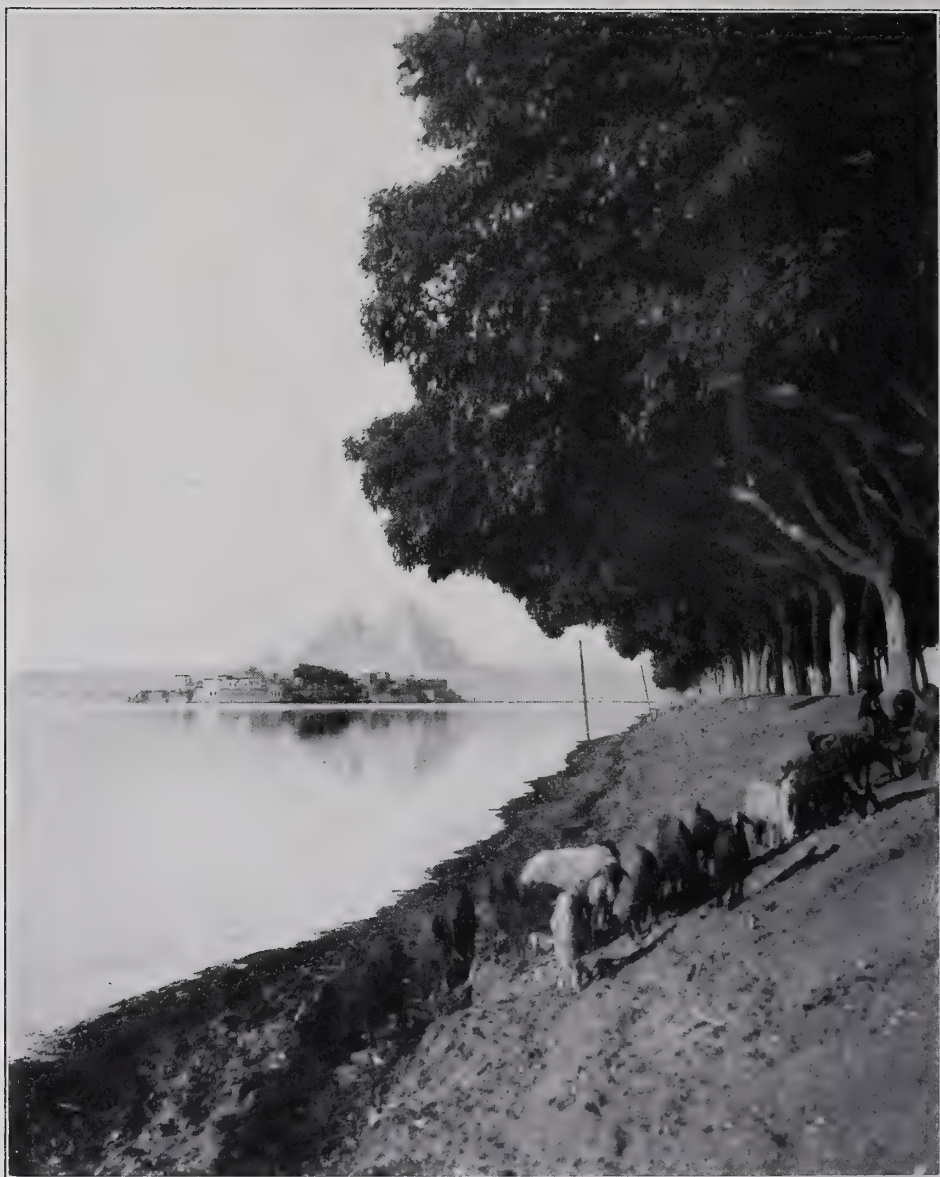


FIG. 46.—Distant view of Gizeh and the Pyramids from the road to Cairo.

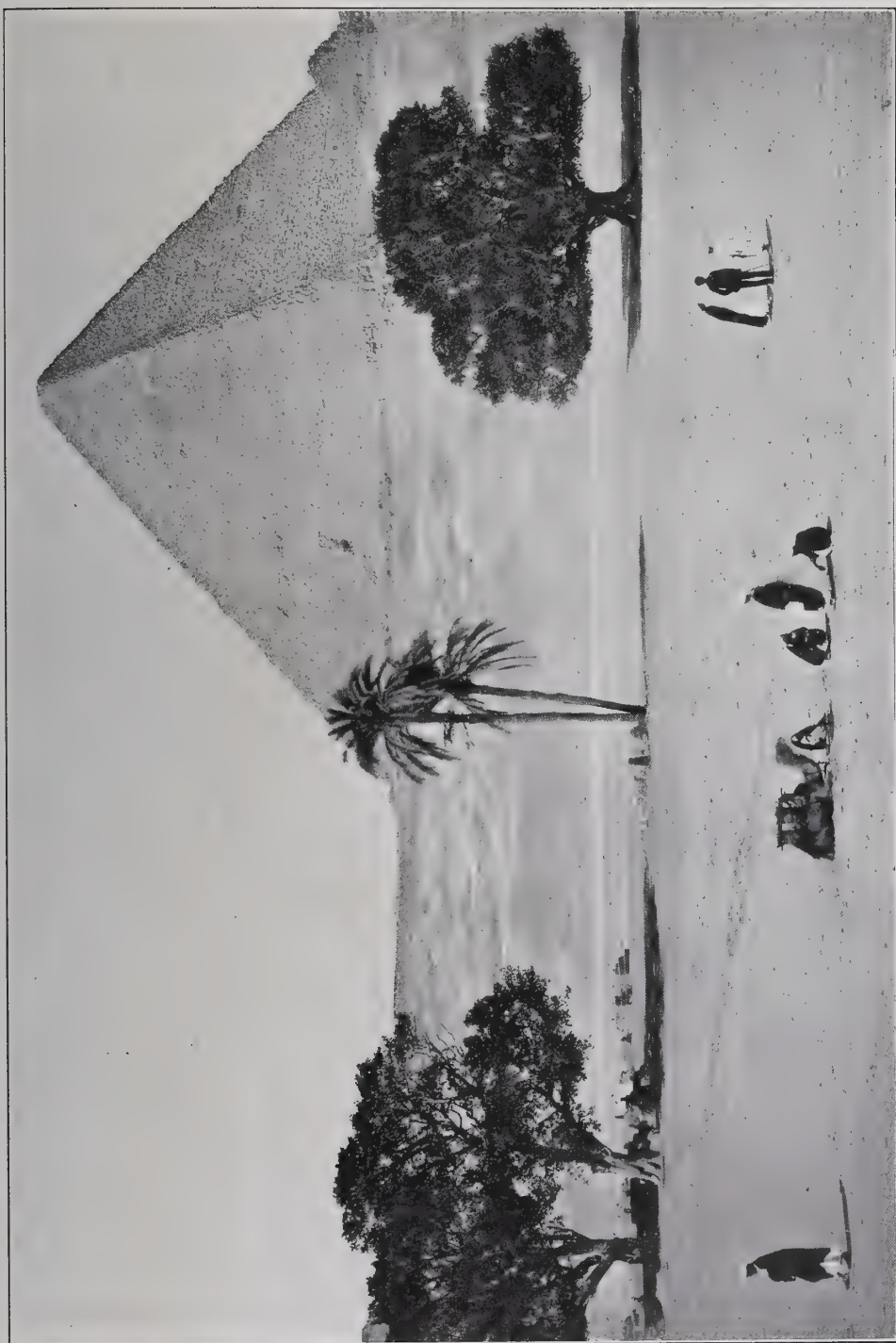


FIG. 47.—The Great Pyramid at Gizeh. In the desert area surrounding the pyramids are situated the Royal Cemeteries. This photograph was made before the excavation of these cemeteries was begun.



FIG. 48.—The Pyramids of Gizeh, showing the extended areas around their bases which contain the Royal Cemeteries. The picture was made before excavations were begun.

excavation on the site had not begun. Gizeh had several years previously been divided between an American expedition, a German expedition, an Italian expedition and an Austrian expedition. Professor Flinders-Petrie had begun excavations at Memphis in 1906 and continued these excavations during a period of three months each year until 1914. Some of the principal portions of the great site, however, still remain untouched. The cemeteries at the Pyramids had all been parceled out, but upon the proclamation of the British Protectorate the German concession and the Austrian concession were forfeited. Likewise the Austrian concession of the half of Tanis was forfeited. An application was accordingly made for the German and Austrian concessions at Gizeh which had been partly worked and the Austrian concession at Tanis which had not been worked at all. The government, however, at that time decided to reserve these forfeited concessions until the close of the war. By chance, one of the most important parts of the cemeteries at Gizeh had been assigned to the Boston Museum of Fine Arts which had conducted investigations there since 1903. Through the Director of these excavations an arrangement was made whereby a part of this site was transferred to Mr. Fisher to excavate on behalf of the Eckley B. Coxe, Jr. Expedition. The Museum has thus enjoyed this year an opportunity of participating in the excavation of the greatest Old Empire site in Egypt.

There remained Memphis. After an examination of this site Mr. Fisher applied for that untouched portion which was believed to contain at some depth the ruins of the Royal Palace of the New Empire. In due time this area was measured out and formally assigned by the Egyptian Government to the University Museum.

Mr. Fisher conducted excavations at Gizeh for a period of six weeks. Among the discoveries which he made was an offering table with two rows of inscription around its edge containing the names of Khufu and Khepra, the builders of the first and second pyramids, and that of Dedefra, a mysterious king of whom little is known and whose place in the fourth dynasty has not been determined. This is the fourth example of his cartouche that has been discovered. Another discovery of special interest made during the excavation of the Gizeh cemetery was an offering chamber built of mud brick with ribbed vault constructed of specially designed brick with interlocking joints. This is the first time that this type of construction has been found in Egypt or on any ancient site.



FIG. 49.—Statue of Mycerinus and his Queen, found in 1910 by Dr. Reisner in the cemetery of Gizeh and now in the Boston Museum.



FIG. 50.—North side of the Gizeh cemetery before excavation by the Eckley B. Coxe, Jr. Expedition. In the background of the picture are seen the tents of the Australian contingent.



FIG. 51.—North side of the cemetery at Gizeh, excavated by the Eckley B. Cox, Jr. Expedition, after six weeks' work.
In the background of this picture, as in the last, are seen the tents of the Australian troops.



FIG. 52.—Excavation of the cemetery at Gizeh. View looking south at the end of four weeks' work. The whole area consists of a maze of tombs. At the lower right hand side of the picture is seen the entrance to a large mastaba with stucco walls painted with scenes in the life of its occupant.

The tomb in which this vault was found is not of later date than the sixth dynasty.

On March 11 Mr. Fisher moved his camp to the Memphis site and work was begun on the 13 of March with a large force of men. The surface of this area was covered with heavy mud brick walls of Roman or Ptolemaic origin. This represented the latest period of occupation. The first operation was to sink a trench down to water level where the sand and mud are saturated with water of the Nile. Below the upper level already described was found a second stratum of occupation which Mr. Fisher has not yet identified. Below this stratum were found traces of a great building which is presumably a part of the royal palace. As the seepage from the Nile at this lower level interfered with the excavations, a pump was installed to keep the diggings dry. In order to facilitate the removal of the dirt without encumbering the site, a section of railroad was laid down to carry to a distance the rubbish removed. In this way the *débris* of the excavations will not be allowed to encumber any part of the ruins and interfere with future excavations. The digging at Memphis has now proceeded for three months. The organization embraces a force of one hundred and eighty men and work has proceeded rapidly. On such a large site where so much *débris* has to be removed, the developments are slow and the laying bare of ancient buildings is a tedious and protracted operation. Nevertheless, the progress that has already been made indicates that the site was well selected. The objects that have been found during the three months' digging have been numerous, although for the most part small. On April 10 Mr. Fisher wrote as follows.

"All the force is now employed on the area where the two exposed tops of columns attracted me some time ago. The plan of the whole is now developing and we have a great door leading to another room to the north. I am quite sure that we have the beginning of the palace here. The columns bear long inscriptions and the jambs of the doors have also inscriptions and reliefs of the king Merneptah making offerings to different deities. When first exposed all the inscribed parts are filled with mud and the surface of the stone itself is very wet and soft. Nothing can be done to it in the way of cleaning until this dries and then the earth peels off rather easily."



FIG. 53.—A painted statuette in a Fifth Dynasty tomb, shown in situ.



FIG. 54.—The offering chamber of a tomb with a figure in relief and a stela in situ.



FIG. 55.—The offering chamber of a tomb excavated by the Eckley B. Coxe, Jr. Expedition in February, 1915.



FIG. 56.—An excavated tomb showing the offering table in situ.



FIG. 57.—Interior of an excavated tomb with a ribbed vault showing interlocking construction.



FIG. 58.—Camp of the Eckley B. Coxe, Jr. Expedition at Memphis.



FIG. 59.—Beginning the excavations at Memphis.

THE CEMETERIES AT GIZEH

The very extensive cemeteries that surround the pyramids of Gizeh contain the tombs of royal personages and high officials of the fourth and fifth dynasties. This was the period during which Egyptian civilization made its greatest strides, when the foundations of the Empire were laid broad and firm, when hieroglyphic writing was perfected and when architecture, painting and sculpture reached their most refined development. The excavations of Dr. Reisner in particular, in these royal cemeteries, have revealed the high artistic achievement of the sculptors of the fourth dynasty, and the Boston Museum has accordingly been enriched by some of the finest examples of Egyptian sculpture which have ever been brought to light. The long and patient researches extending over a period of eleven years which Dr. Reisner has carried on have thus been richly rewarded.

Mr. Fisher was already familiar with the ground, having participated for several years as Dr. Reisner's assistant in the excavations of the Boston Museum. During the present year the Boston Museum and the University Museum were the only institutions which conducted excavations at the Pyramids.

MEMPHIS

Present day knowledge of the history of Memphis is derived from two sources, namely, from Herodotus and from hieroglyphic inscriptions that have been unearthed on the site of the city itself. Its history began with Menes, the first historical king of Egypt, who was the founder of Memphis or at least of its greatness as a capital. Accordingly, although it seems to have existed in prehistoric times, we may place the beginning of the history of Memphis at about 4000 B. C. Its history ended at the time of the Arab invasion when the Roman governor signed the capitulation in its palace. During its long history Memphis was the greatest capital of Egypt. It was the commercial center of the world. Through the highroad of the Nile its trade was carried to the shores of the Mediterranean. By caravan its commerce reached into Babylonia and even farther to the East. It is true that for a few centuries Thebes rivaled Memphis in importance and it is true also that after the conquest by Alexander the new city that he founded surpassed it in importance, but, as



FIG. 60.—Part of the excavation of the building of Merneptah, Memphis.



FIG. 61.—Columns partly cleared in the excavation of the building of Merneptah, Memphis.

Professor Flinders-Petrie observes, "These cities are only episodes in the six thousand years of national life."

Memphis was situated on the west bank of the Nile about fourteen miles south of Cairo. According to the modern interpretation of the ancient authorities it stretched for a distance of eight miles along the bank and spread about four miles towards the desert. It contained the temples of nineteen gods, including that

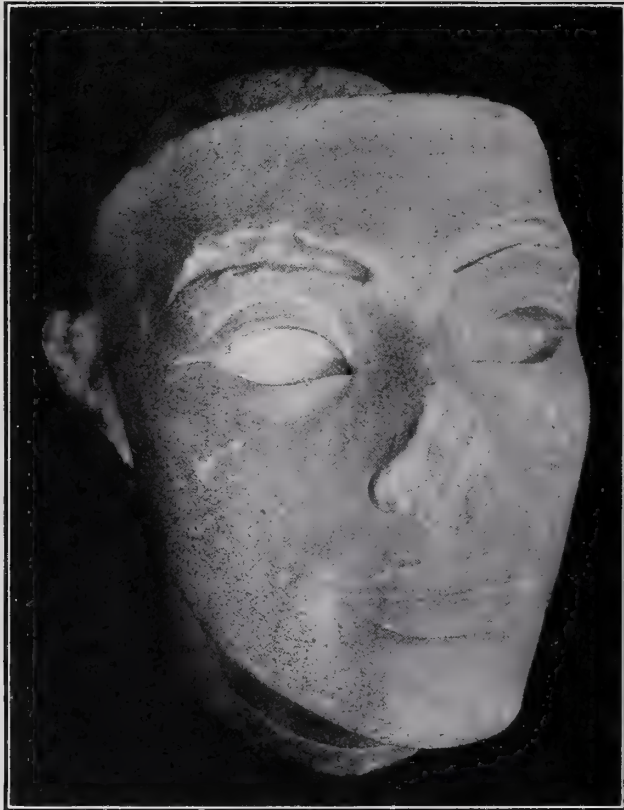


FIG. 62.—Head of a statue of red sandstone excavated at Memphis.

of the bull Apis. The greatest of the temples was that of Ptah described in detail by Herodotus. Today the site of Memphis is marked by a grove of palm trees, cultivated fields, heaps of rubbish and the modern town of Bedreshen. The sand from the desert, mixed with mud from the Nile, has accumulated to a great depth, leaving whatever remains of the ancient city far beneath the surface.

Since the time of the Moslem conquest, Memphis has been used



FIG. 63.—Sphinx of Ramesses II found by Prof. Flinders-Petrie in the Temple of Ptah at Memphis in 1912 and now at the University Museum.

as a quarry for building stone; its proximity to Cairo has exposed it especially to depredations of this kind. Much of that modern city has been built of material transported from Memphis.

Professor Flinders-Petrie began excavations at Memphis in 1908. These excavations were continued for several years, but almost the entire site still remains to be excavated. The Museum, which had already participated in Professor Petrie's excavations, has long had an interest in Memphis. The great granite sphinx which stands in the courtyard of the Museum formerly stood in the temple of Ptah at Memphis, where it was unearthed by Professor Petrie in 1912. Professor Petrie's work was brought to a close at the time of the outbreak of the European war and since that time, the University Museum, through the Eckley B. Coxe, Jr. Expedition, has taken up the arduous task of excavating in a systematic way the site of the greatest capital of ancient Egypt.



FIG. 64.—Head of a limestone statuette excavated at Memphis.

TWO BLACK-FIGURED AMPHORÆ FROM ORVIETO

TWO black-figured amphoræ in the Museum are here for the first time adequately illustrated. One, Figs. 68 and 69, has been published before, but with illustrations which do scant justice to the beauty of the paintings. The other has never been published, although Adolf Furtwaengler included a brief description of it in his notes on American museums and pointed out that its style was related to that of Exekias. Both vases were put together from fragments found in tombs at Orvieto, and as in the case of other vases made up from pieces from these tombs, many parts are lacking. The missing parts, however, are not now so extensive as heretofore, for in the first restoration of these vases which was made shortly after the fragments reached the Museum in 1898, several fragments were overlooked. Of these the most important were the pieces composing the two central figures of the scene in Fig. 66, a fragment with two letters from the inscription at the left of Fig. 65, and one from the lower part of the figure at the right of Fig. 68. These were discovered among the unclassified fragments from the Orvieto tombs and introduced into their proper places.

Of the two painted panels on the amphora (Figs. 65 and 66), the one depicts the familiar story of Herakles' combat with the Nemean lion, the other a scene which is exceedingly rare and difficult to interpret. The picture of Herakles' exploit is arranged in the old-fashioned manner, whereby the hero is represented with one knee bent almost to the ground and the contour of his straining back making a straight horizontal line across the center of the panel. Athena stands stiffly by with spear and shield. The shield shown in profile is ornamented with a Gorgon's head, which the artist in his inability to foreshorten has cut just in half. Iolaos, Herakles' helper, holds the hero's knotted club and raises his left hand in token of his excitement. His hair is rendered by neat rows of spirals, and his eye and beard are of the form chiefly used by painters of the black-figured style in the closing years of the sixth century. Each figure is identified by an inscription. Of Herakles' name only five letters remain, written horizontally above his back. The



FIG. 65.—Painting on the obverse of an amphora in the University Museum, showing Herakles and the Nemean lion.



FIG. 66.—Painting on the reverse of an amphora in the University Museum.

name of Athena is written in the genitive and with a cross-barred theta which is supposed to be a lineal descendant of the old pictographic sign of a wheel. Along the left of the panel is a perpendicular inscription announcing that someone whose name ends in *ες* is lovely. A strange interpolation, it seems, in a picture of Herakles' exploit, but this habit of vase painters is well known. It was the fashion to inscribe upon vases the name of some beautiful youth who was at that moment the favorite in the city of Athens. The name of the boy whose beauty is here celebrated can only be surmised. It was apparently a short name and of the short names ending in *ες* which appear on vase paintings of this period one might choose Pyles or Teles or several other names, but certainty is impossible.

The interpretation of the scene on the other side of the vase involves an archæological problem the solution of which is not yet found. It is a Dionysiac scene which is here represented. The figure of the god himself may be recognized both by the trailing branch of vine weighted with full clusters of grapes and by the inscription on his right. The agitated maiden behind him can hardly be other than a Maenad and the figure on the extreme left is a satyr, the tip end of whose tail may be traced in the slight line of purple just below the break in the lower left hand corner of the panel. To the right of this figure are the last two letters, *ον*, of an inscription which might be restored as **Εχον*, or any other of the names in *ον*, by which satyrs were known.

But it is the figure of the woman or goddess between Dionysos and the satyr which is the chief concern. She stands with her elbows out and her forearms level and below her arms may be seen two small pairs of legs. The question is, who is she and who are the twins? There are so few vases in which such a figure occurs that it is no arduous task to enumerate them. They are as follows.



FIG. 67.—Figure of Kourotrophos with Twins, from a vase in the British Museum.

1. Amphora in the British Museum, published in Gerhard, *Auserlesene Vasebilder*, pl. 55. There are four figures in the scene, Hermes, Dionysos with a branch of vine and a drinking horn, a woman or goddess with two children on her arms, and a satyr. The figure of the goddess is reproduced in Fig. 67.

2. Skyphos, in Würzburg, published *id.*, pl. 56. Here the figures are Hermes, two satyrs, Dionysos, and a woman with one child in her arms.

3. Vase in the Etruscan Museum of the Vatican, published in *Museo Gregoriano*, II, pl. 39, 1, Hermes, Dionysos and a woman with two children.

4. Amphora in the Louvre, published in *Élite céramique*, II, 2. A woman or goddess with two children stands between two columns, on one of which is an owl.

5. Vase published in Micali, *Storia*, pl. 85, 1. A woman with two children stands between Dionysos and a satyr.

6. Fragment from the Acropolis in the Acropolis Museum, published in Graef, *Die antiken Vasen von der Akropolis zu Athen*, pl. 60, 3. Here a procession of gods is represented and beside Dionysos stands a goddess who is named by an inscription, Aphrodite. Only half of this figure is preserved. Part of one child remains and it is presumable from the position of the figure that two children were carried originally.

7. An unpublished fragment from the Acropolis, Athens, in which Aphrodite is represented with two children on her arms and this time they are inscribed Ἴμερος and Ἔρως or Love and Longing.

In order to have the data quite complete for deciding who this enigmatical madonna is, there should be borne in mind a passage in Pausanias (Description of Greece, V, 18, 1) where he is describing the chest of Cypselus. "In the second field on the chest we will begin to go round from the left. A woman is represented carrying a white boy asleep on her right arm: on her other arm she has a black boy who is like one that sleeps: the feet of both boys are turned different ways. The inscriptions show, what it is easy to see without them, that the boys are Death and Sleep and that Night is nurse of both."

From all this it may be gathered, first, that more than one goddess was represented with two children (or more rarely one) as attributes, and second, that in scenes where neither the goddess

nor the children are identified by inscriptions Dionysos and members of his train are with one exception present.

Miss Jane Harrison of Cambridge has argued that the process of "The Making of a Goddess" was from the general to the specific, that in early religion there was a mother goddess who "was an attribute become a personality," a Kourotrophos or nurse Child Rearer, and that later when her personality had faded her epithet of Kourotrophos and her functions of Child Rearer were usurped by other and more popular goddesses. She cites vase paintings as evidence for the "slow differentiation and articulation of theological types." "At first all is vague and misty; there is, as it were, a blank formula, a mother goddess characterized by twins. If we give her a name at all she is Kourotrophos. As her personality grows she differentiates, she is Aphrodite with Eros and Himeros, she is Night with Sleep and Death. When Apollo and Artemis came from the North they became the twins par excellence, and they were affiliated to the old religion; the mother as Kourotrophos became Leto with Apollo and Artemis."

The argument is not as convincing as it would be if the goddess were not named Aphrodite on the earliest of the fragments preserved. Moreover, the constant association of this early Madonna with Dionysos and his train implies a particular goddess connected with the Dionysiac cult. It may be that the goddess here depicted is Semele, mother of Dionysos, who, as Miss Harrison herself has shown, is in essence the Earth-Mother. In later art Mother Earth has very usually two children as attributes, so that this identification is at least possible, although it cannot be proved.

Of the other amphora, the paintings of which are reproduced in Figs. 68 and 69, no detailed description is necessary, inasmuch as it has already been described both by Professor Bates and by Adolf Furtwaengler. On the one side Ajax rescues the body of Achilles while Menelaos transfixes with his spear one of the Ethiopian followers of Memnon, whose name—Amasos for Amasios, the genitive of Amasis—is written above his head. The master of this vase was a realist. He delighted to show the blood spurting from the negro's wound, the "undoing of his knees" and the limp and heavy weight of the lifeless corpse. He delighted in the ornaments of armor, in the devices of their shields, in the little gorgons' heads on Ajax's greaves and above all in the lovely Ionic volutes and finely wrought patterns of the thorax. Three of the warriors are identified by



FIG. 68.—Painting on the obverse of an amphora in the University Museum, representing the death of Achilles.



FIG. 69.—Painting on reverse of an amphora in the University Museum, representing the death of Antiochus.

inscriptions. Above the prostrate body is 'Αχίλλεος "of Achilles." **Μενελαος** is written parallel to the spear in the hands of the central figure, and 'Αμασος for 'Αμασιος, above the head of the falling Ethiopian.

On the reverse a prostrate body forms again the center of the scene. It is identified by the inscription 'Αντιλοχος. Of the three warriors who are driving off his murderers, only the last one has a name, **Εὐφορβος**.

The vase, in Furtwaengler's judgment, is to be ascribed to the painter Exekias. It is also to be associated with an amphora in the British Museum, on which one of Memnon's followers is named with an inscription, 'Αμασις.

E. H. H.

CONEBO POTTERY

THE Conebo is one of several related tribes occupying the territory along the Alto-Ucayali River speaking dialects of the Pano language. Their cultures, while not identical, are very similar. One tribe may excel in the manufacture of one thing and supply its neighbors with that particular article. For example, the Piros make the best canoes and are the best canoemen; the Cashibos make the best bows and arrows; the Amahuacas raise the best dogs and trade them to their neighbors. The Conebos and Shipibos are the best pottery makers in the whole Amazon valley and furnish supplies to all their neighbors. The Conebo is the larger of the two tribes, makes more pottery and hence gives its name to all the Ucayali pottery, which makes it very difficult to distinguish the types. The decoration is practically identical, the method of manufacture is the same, the materials are similar, but the Conebos are the better mechanics and the better artists. Hence, one may be practically certain that all the most careful decorations are made by the Conebos, while any common piece may have been made by either tribe.

The women are the pottery makers and gather all the materials, while the men do most of the trading. A Shipibo trader, realizing the advantage, may marry a Conebo potter and thus complicate matters for the student.

The materials are all obtained locally. The white clay is collected from the river banks at low water and the pottery, on this account, is made during the dry season. The ash of the Ohé tree, or some other soft wood tree giving a very fine white ash, is mixed with the clay in an old pot where it can be kept clean. When the clay mixed with water has reached the desired consistency, a small lump is taken between the hands and rolled into a long fillet, the size depending upon the thickness of the pot. Then this is placed around on the edge of the pot being constructed, squeezed into place by the fingers, and rubbed smooth by holding a stone on the inside and rubbing with a shell on the outside. Thus the worker goes round and round the pot until it is completed.

When the pot is finished it is allowed to stand in the shade until it has hardened. If it is a cooking pot it is fired at once; if

it is to be painted, a thin white slip made of very fine white clay is first applied and when dry the decoration is laid on with a strip of bamboo.

The rough pots are placed in a slow open fire and thoroughly burned. The fine ones are treated very differently. A large pot with a hole in the bottom is placed on three stones or more often three piles of inverted pots. The pots to be burned are inverted inside the large pot. The first one is placed over the hole and



FIG. 70.—Large Conebo jar measuring 4 feet in diameter and 3 feet in height.

ashes poured around and over it, others are inverted over this until the pot is full or all are used. Then a slow fire is kept burning under the large pot until all are well cooked, when they are taken out one at a time and while still hot, melted copal is poured over them. This accounts for the glazed appearance characteristic of this pottery.

The various designs used in the decoration must have had some symbolic significance in the beginning, but at present no

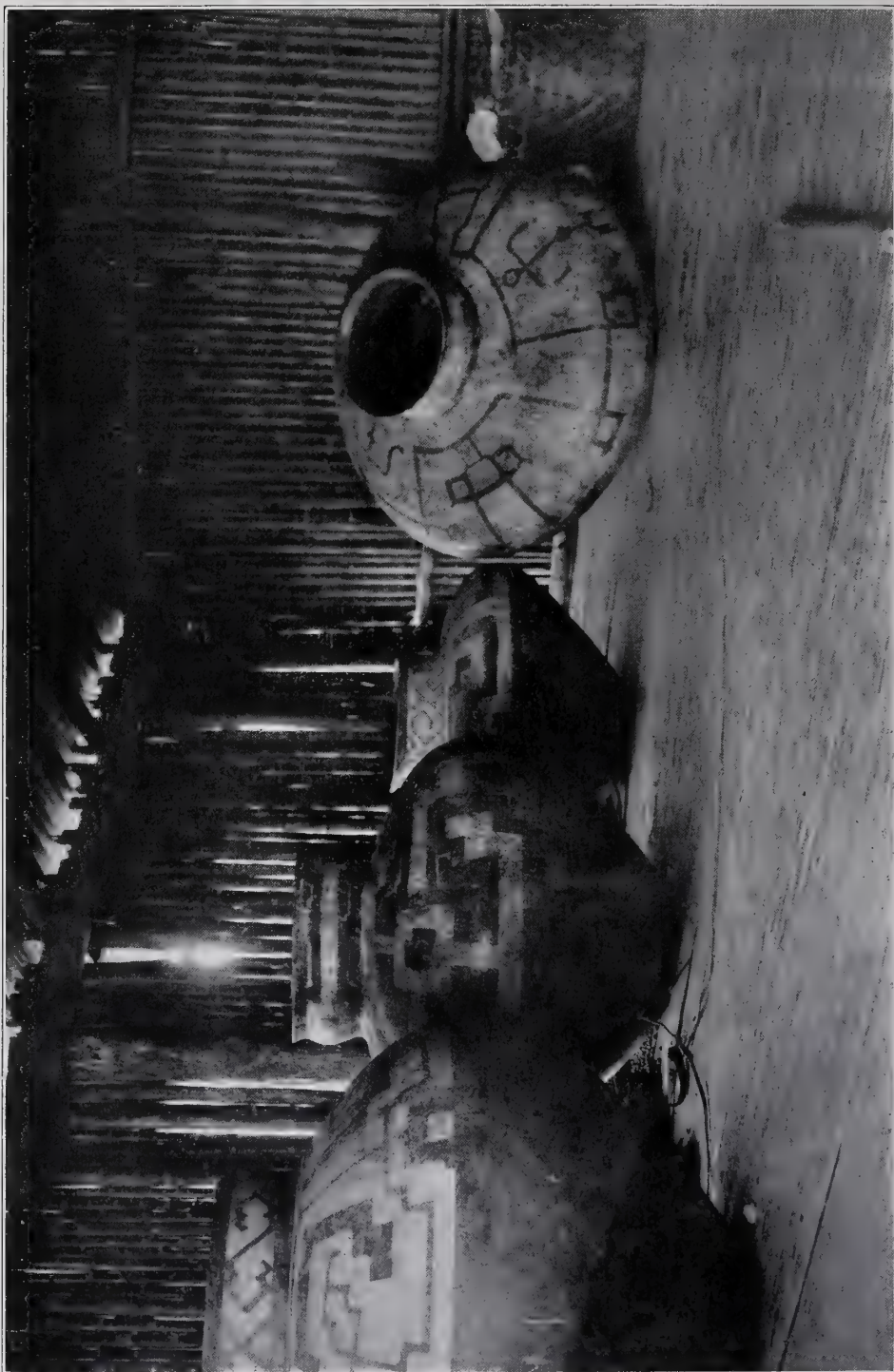


FIG. 71.—A group of large Conebo jars.

one seems to know the symbolism. They say they have always used these forms but don't know why.

The rough pottery is used for the ordinary cooking purposes; the small bowls for dipping food and drink from the larger pots; the larger bowls for passing drink to guests; the larger jars with short necks for carrying and storing water; while the largest of all are made primarily to hold the intoxicating drink used at the puberty ceremony for girls.

At the time of this ceremony a great fiesta is held when all drink freely of "chichi," the native intoxicating liquor made from fermented juca (sweet casava) and corn. The mother of the girl makes one or more of these very large pots to hold the supply of liquor for this occasion. After the ceremony they may be used for any kind of storage purposes. The largest one in the collection sent to the Museum, which is the largest I ever saw, was filled with beans. Another of these jars was filled with unfermented drink.

To make the "chichi" the younger women chew the root of the juca until saliva is thoroughly mixed with it and then spit it into a large wooden trough, made from the hollowed trunk of a tree. The trough is then placed in the sun for two or three days while the mass ferments. Ripe corn is then finely ground and added with water. Fermentation continues for two days more, during which the liquor is constantly stirred. The girls strain it through closely woven baskets of palm into the large pots, where it is allowed to ripen for three or four days. All the time the girls are working with it they expectorate into it, even after it has been strained into the large pot.

The account of Conebo pottery given above is taken from Dr. Farabee's notes. The collection which he sent to the Museum consists of over two hundred pieces varying in size from that of a teacup to great jars four feet in diameter and three feet high. The material is a fine clay containing a small amount of sand. All of the vessels are built without the use of the wheel. They are usually quite symmetrical in form and the walls are remarkably thin. The ware is uniformly fine in texture, is well burnt and gives forth a clear metallic note when struck. The decoration in the great majority of the specimens is uniformly of a highly conventionalized character corresponding in style to what is usually described as geometrical.

In a few instances animal and vegetable figures appear. The designs are applied freehand in broad bands or in fine lines upon a white slip, and the colors are black, red and brown.

All of the decorated surfaces are covered with a coat of transparent copal which gives the pottery the appearance of being glazed. The inside of each vessel is usually covered with a thicker coat of copal.

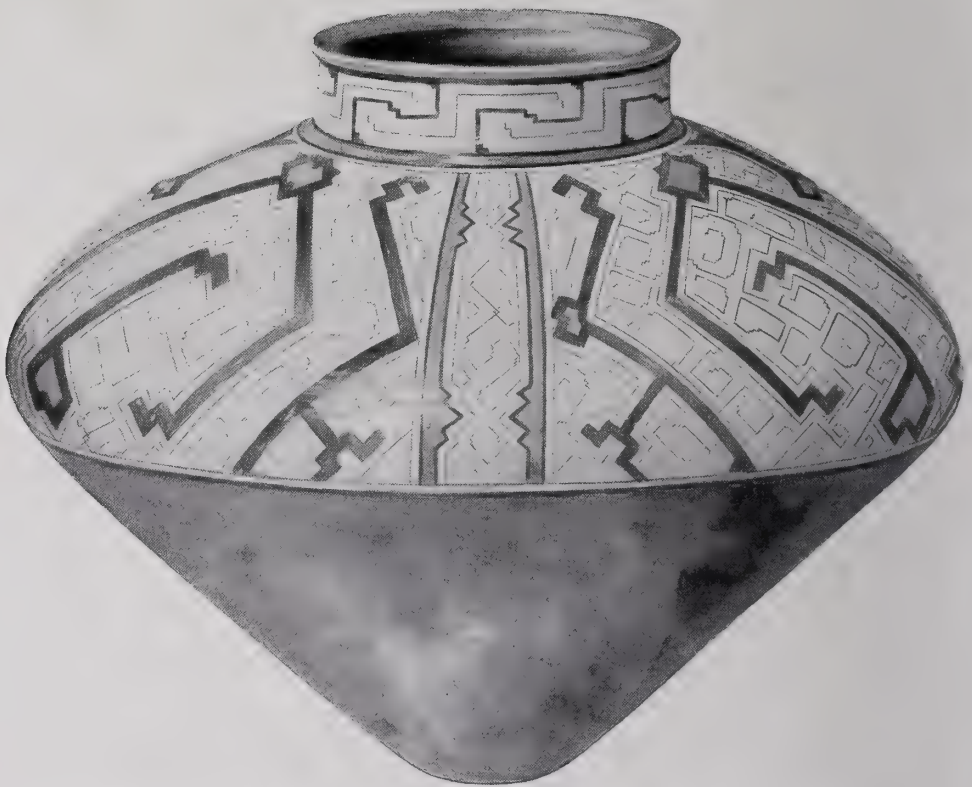


FIG. 72.—Conebo jar measuring 2 feet 9 inches in diameter and 2 feet 2 inches in height.



FIG. 73.—A Conebo Man.

NOTES

An interesting Eskimo collection obtained at Chesterfield Inlet has recently been acquired by purchase. This collection consists of caribou skin costumes, bird skin costumes, harpoons, various utensils, weapons and carvings.

Three pieces of Rakka pottery and one of Rhages pottery were acquired at the sale of the General Brayton Ives Collection. Since that time a series of thirty pieces of Persian pottery has been bought. This collection contains several pieces of early Rhages ware with lusted glaze as well as other types assigned to the Rhages group of wares. It also contains several examples of the sixteenth century ware with patterns in brown copper lustre. In addition to the Persian pottery proper, there are in the collection a number of pieces of Damascus ware and of the Turkish ware usually called Rhodian. This collection of rare pieces will form the foundation of a collection of Persian and Turkish potteries in the Museum.

Four large Chinese garden vases of the late Sung and early Ming dynasties have been acquired by purchase. These four specimens were formerly exhibited as part of the Morgan Collection in the Metropolitan Museum.

One of the most interesting acquisitions recently made by the Museum is a series of eight Chinese paintings of the Sung Dynasty. Among these is one remarkable landscape by Hsü Shi-ch'ang. This landscape, which is on a piece of silk measuring 8 feet 8 inches by 8 feet 5 inches, is a supreme masterpiece of Sung painting and exhibits admirably the characteristic features of the painting of this classic period. The other paintings in the series, also on silk, all share the qualities of strength and spontaneity which mark the work of the Sung masters.

Three stone statuettes of the Wei and T'ang dynasties have been purchased. One represents Kwan-yin seated on a lion; another represents the same divinity standing and clad in elaborate draperies richly jewelled. The third represents Kwan-yin in high relief. In this example the goddess shows the side face; her body, which is shown full length, is covered with graceful flowing robes.

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A cloisonné mirror with designs representing birds and flowers has been added to the Chinese collection. This piece, which is an early Ming production, is the second piece of these rare early cloisonnés which the Museum has recently acquired.

An ethnological collection from the South Seas, including specimens from Samoa, Tahiti, Hervey Islands, New Guinea, Fiji and Bougainville, containing in all over four hundred specimens, has been acquired by purchase.

Mrs. William F. Jenks has presented to the Museum thirty pieces of Kabyle pottery.

Mr. Alfred M. Collins has presented to the Museum on behalf of the Collins-Day South American Expedition, a collection of weapons, clothing and utensils obtained by the expedition from the Indians in Bolivia and western Brazil. The Collins-Day Expedition left Philadelphia on Christmas Day, 1914, and travelled by way of Moliendo in Peru to La Paz in Bolivia. From La Paz the expedition went to the headwaters of the Chapore and descended this river into the Mamore, and thence proceeded down the Madeira and the Amazon. The main object of this interesting and successful expedition was the collection of natural history specimens. At the same time opportunities were found for collecting data relative to the Indian tribes on the Chapore and the Mamore, especially the Yuracaras and the Joaquinanos.

Miss Siter has presented to the Museum, through Mr. J. G. Rosengarten, two Indian wampum belts.

Mr. Charles A. Brinley has presented a shell and fiber necklace obtained forty years ago from the Mohave Indians of California.

Mr. Charles J. Cohen has presented a Chinese necklace.

Mr. Martin Van Straaten of London, who paid a visit to America early in the year, loaned to the Museum four tapestries of the early seventeenth century. These tapestries, which measure thirteen feet square, represent figuratively Europe, Asia, Africa and America. Mr. Van Straaten, in returning to England, was lost with the Lusitania.

Mr. Louis Shotridge has gone to spend the summer among the Tlinkit Indians in Southeastern Alaska. Mr. Shotridge will be occupied in recording in the native language the myths and traditions of the Tlinkit and will also procure information relative to the practice of ceremonies among the tribes. He will also make ethnological collections.

Alexander Scott, Esq., who is now in India, will make ethnological collections for the Museum.

An additional appropriation has been made to Mr. H. U. Hall for the Siberian Expedition in order to enable him to complete his investigations among the tribes of northern Siberia.

Dr. Edith H. Hall, the Assistant Curator of the Mediterranean Section, well known as a classical archæologist, was married on May 12th. Dr. Hall took her position in the Museum in 1912. Before this, she had taken part in the expeditions which the Museum supported in Crete and after her appointment as Curator in the Museum, continued to work in the same field. The results of these investigations are published in the Anthropological Series of the Museum. The classical collections have been entirely recatalogued and rearranged during the period of Dr. Hall's curatorship and many important additions were made to these collections during that time. Dr. Hall's services have been of the greatest value to the Museum.

Many scholars have expressed their appreciation of the recent publications of the Babylonian Section of the Museum. The works by Dr. Arno Poebel have especially elicited favorable comment. The following passage from a letter written by Prof. A. H. Sayce of Edinburgh and Oxford serves to indicate the estimation in which these volumes are held by the leading Oriental scholars.

"I have just returned to my Scotch home after having been in France for some months and have found a goodly feast of your Babylonian and Oriental publications waiting me. Many thanks for them. Let me congratulate you on the amount of valuable work which they represent and above all on the extraordinarily important texts which your Museum contains. The latter contribute the most important discovery made in the Assyriological field since Layard's discovery of the Kouyunjik library. Poebel's three new volumes will revolutionize our study of Babylonian history and Sumerian grammar."

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No. 3



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GUATEMALA MYTHS

IN Guatemala are many high mountains and many fertile valleys with beautiful lakes and running streams. Nowhere in the world is there a fairer land and no part of it is more fair than the region known as the Alta Vera Paz or the High True Peace. In earlier times this region was called Tierra De La Guerra, the Land of War, because the Kekchi Indians who inhabited these highlands resisted the Spaniards so bravely that the invaders could make no progress against them. Then the great priest, Las Casas, said that if the soldiers were withdrawn, he would agree to conquer the Indians with a company of monks. The plan succeeded so well that the name of the country was changed from the Land of War to the Land of Peace. The victory which was thus peacefully achieved has left its mark upon the Indians to this day, for in most of their villages there is to be found a cross and a shrine to the Virgin. At the same time, the religious rites observed in these villages are often more pagan than Christian. Moreover, the Indians of the Alta Vera Paz retain their own language, and the men and women wear the same costumes as did their ancestors. The native arts and industries have not been affected by the peaceful conquest of the sixteenth century. In their manners and customs and in all that pertains to their domestic life, the Indians of the Alta Vera Paz scarcely differ today from their ancestors at the time of Las Casas. They are a gentle folk, leading an industrious and altogether wholesome existence in the peaceful land of their fathers.

Guatemala is a land which in its beautiful and romantic scenery may be said to resemble Greece. Like the ancient Greeks, the people

of Guatemala have, from the most remote times, peopled their mountains and valleys and forests and rivers and plains with gods and demi-gods, demons and spirits. In other ways, too, the Guatemala people resemble the ancient Greeks.

I have been so fortunate recently as to receive from a friend in Guatemala, whose name I regret to say I am not permitted to use, a number of notes relating to the native customs, together with a collection of tales related by members of the Kekchi tribe. Among the beliefs which the Kekchis share with all their neighbors, none is more common or persistent than the belief in El Sisemite. This is the name by which he is most commonly known. Among the Kekchis he is known as Li Queck.

EL SISEMITE

There is a monster that lives in the forest. He is taller than the tallest man and in appearance he is between a man and a monkey. His body is so well protected by a mass of matted hair that a bullet cannot harm him. His tracks have been seen on the mountains, but it is impossible to follow his trail because he can reverse his feet and thus baffle the most successful hunter. His great ambition, which he has never been able to achieve, is to make fire. When the hunters have left their camp fires he comes and sits by the embers until they are cold, when he greedily devours the charcoal and ashes. Occasionally the hunters see in the forest little piles of twigs which have been brought together by El Sisemite in an unsuccessful effort to make fire in imitation of men. His strength is so great that he can break down the biggest trees in the forest. If a woman sees a Sisemite, her life is indefinitely prolonged, but a man never lives more than a month after he has looked into the eyes of the monster. If a Sisemite captures a man he rends the body and crushes the bones between his teeth in great enjoyment of the flesh and blood. If he captures a woman, she is carried to his cave, where she is kept a prisoner.

Besides his wish to make fire, the Sisemite has another ambition. He sometimes steals children in the belief that from these he may acquire the gift of human speech.

When a person is captured by a Sisemite the fact becomes known to his near relations and friends, who at the moment are seized with a fit of shivering. Numerous tales are told of people who have been



Photo by G. B. Gordon.

FIG. 74.—A monolith at the ruins of Quirigua in Guatemala. This was a city of the ancient Mayas, concerning which neither history nor tradition has anything to say.



Photo by G. B. Gordon.

FIG. 75.—A scene at the ruins of Quirigua in Guatemala. The ancient Maya temples and shrines are buried in forests of mahogany and palm trees.

captured by the Sisemite. The following incident is related by a woman who had it from her grandmother.

A young couple, recently married, went to live in a hut in the woods on the edge of their milpa in order that they might harvest the maize. On the road Rosalia stepped on a thorn and next morning her foot was so sore that she was unable to help Felipe with the harvesting, so he went out alone, leaving one of their two dogs with her. He had not been working long when the dreaded feeling, which he recognized as Sisemite shivers, took hold of him and he hastily returned to the hut to find his wife gone and the dog in a great fright. He immediately set out for the village, but met on the road the girl's parents, who exclaimed, "You have let the Sisemite steal our child, our feelings have told us so." He answered, "It is as you say."

The case was taken up by the authorities and investigated. The boy was cross-examined, but always answered, "The Sisemite took her, no more than that I know." He was, in spite of the girl's parents' protests, suspected of having murdered his young wife, and was thrown into jail, where he remained many years.

At last a party of hunters reported having seen on Mount Kacharul a curious being with hairy body and flowing locks that fled at sight of them. A party was organized which went out with the object of trying to capture this creature at any cost. Some days later this party returned with what seemed to be a wild woman, of whom the leader reported as follows. "On Mount Kacharul we hid in the bushes. For two days we saw nothing, but on the third day about noon this creature came to the brook to drink and we captured her, though she struggled violently. As we were crossing the brook with her, a Sisemite appeared on the hillside, waving his arms and yelling. On his back was a child or monkey child which he took in his hands and held aloft as if to show it to the woman, who renewed her struggle to be free. The Sisemite came far down the hill almost to the brook; he dropped the child and tore off great branches from big trees which he threw at us."

The young man was brought from his cell into the presence of this wild creature and asked if he recognized her. He replied, "My wife was young and beautiful; the woman I see is old and ugly." The woman never spoke a word and from that time on made no sound. She refused to eat and a few days after her capture she died.

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Felipe lived to be an old man and the grandmother of the woman who told this story remembered him as the man whose wife had been carried away by the Sisemite.

THE ENCHANTED BULL

On Sactzicuil, a hill in the Alta Vera Paz, there was once an enchanted bull made of pure gold. The Kekchis held fêtes in honor of this bull and worshipped him. At stated seasons all the people turned out to adorn his home with flowers, to fan him with the fragrant smoke of burning copal and to dance about him to the accompaniment of music. At last, however, the bull sank down into the hill. When this happened a wizard, mighty in magic among the Kekchis, ordered one half of the women of the tribe to wear the tupuy in memory of the bull's tail and the other half to cut their hair in a certain fashion in memory of his ears. And to this day some of the women of this tribe smooth their hair down to the nape of the neck and then wrap it round and round with a cord of red wool until it is as thick and as long as a bull's tail. The other women of the tribe cut a lock of hair on each side of the forehead and these locks hang down like the two big ears of the bull.

THE STORM

Reponcace, the lightning, is a big fish with dazzling fins that lives deep in the sea. Cace, the thunder, is a very old man whose voice is harsh and loud and who dwells in thirteen green hills. Sometimes the big fish comes up from the depths of the ocean to sport and play, and when by chance one of his fins rises above the water its brilliancy illumines earth, air and sea. This angers the old man of the hills, who roars till the earth and air tremble. These two, the flash of the fish's scales and roar of the old man's voice, bring down the rain, but when it is over all is once again calm and beautiful, for the fish returns to the deep sea and the old man of the thirteen green hills falls asleep.

THE RIVER GODS

The Indians never drink cold water. When asked to explain this, they say, "Water when it is cold is bad for our stomachs." About an Indian's house there are always small earthen pitchers or



Photo by G. B. Gordon.

FIG. 76.—An inscribed monolith at the ruins of Quirigua in Guatemala. This stone shaft is about thirty feet high, and though partly fallen is maintained in its position by the foundations.



FIG. 77.—The village fountain. Always a beautiful and animated place where the handsome girls and women come to fill their water jars and to do their washing.

jars that can be filled with water and set against the fire that constantly smoulders in the middle of the floor. No Indian starts on a journey without a small bundle of dry twigs for starting a fire and a little jug for heating water.

In the Alta Vera Paz there are numerous streams; some are cool, some are warm and some are salt. These streams often become rushing torrents during the rainy season. Between Teleman and La Tinta, two small towns, there is a stream crossed by a road much frequented by the Indians. Being warm, the water of this stream is much loved by the Indians, who usually take a draught in passing to quench their thirst. An Indian arriving at this stream during the rainy season invariably casts his bundle of dry fagots in the stream, which rapidly bears it away, but if the time of his passing takes place in the dry season when the current is not sufficient to bear the bundle of fagots away, he carefully deposits it in some convenient spot on the bank and every Indian who comes after him does likewise, thus increasing the pile until it is often six feet high. When the rain falls and the stream rises it carries this pile away.

When the Indian casts his fagots on the water he is sending them to a man and a woman who, according to his belief, live at the source of the stream and who never grow old because their youth is yearly renewed. The object of casting the fagots in the stream is that these spirits may not want fuel to keep the water warm. When the river rises and bears the pile on the bank away, the Indian says, "The young people have taken the fagots so we shall have warm water all this season."

THE TOOTHACHE

When a Kekchi Indian has toothache he says he has xul-hé, which means that the mouth maggot is troubling him, and he goes in search of the medicine man who alone can drive it out.

The patient seats himself, the medicine man stands behind him, gently rubs over the seat of pain and he addresses the xul-hé in the following incantation.

I know thee, thou insect, thou xul-hé.
Thou thinkest no man knows by whom thou wert begotten;
Nor from whence thou comest. But I know,
For great snakes are sons of mine.

I have power. I have poison to quench thy fires; to annul thy power.

I am thy father and thy mother.

I know that thou comest from an ear of corn on the highest stalk in the biggest milpa around here.

As I am thy father and thy mother, I have authority over thee.

And I bring three remedies the like of which thou has never seen before. Any one of these will quiet—will quiet thee by casting out thy vexation:

By driving out thy sweetness and thy wrath.

[The medicine man here places the bruised leaves of an herb called quejen in the patient's mouth and continues,]

I drive thee to the bottom of the great lake.

Here thou shalt go into a cave.

Behind the largest stalactite in this cave there lives a monster crab.

He will bind thee to a red water plant.

Failing this he will bind thee to a rotting twig near a rock at the bottom of the lake.

A little of thy might—a little of thy power,

Shall I borrow from a green hill, from a pleasant valley.

Oh! mighty spirit of the thirteen valleys.

Oh! mighty spirit of the thirteen mountains.

Aid me in casting out this pain-giving mouth insect.

The medicine man then gently passes his hands over the patient's face while he whistles softly.

"Depart! Go forth!" he says, as he blows on the seat of pain. The xul-hé departs, and the relieved patient must take his leave without looking back.

It will doubtless strike many readers that the belief that the toothache is caused by a worm pertains to Chinese medicine and that the medicine man's performance suggests a borrowed custom. That such should be the case is not credible. The belief itself and the method of cure are clearly native to America and furnish an example of native medicine and magic.

This may be illustrated by reference to a famous Indian document. The Popol Vuh is the sacred book of the Quichés, another great Guatemala tribe living southwestward from the Kekchis. The Popol Vuh was written a few years after the Conquest, by a



FIG. 78.—The ruins of the church of Carmen in Antigua, Guatemala. This early Spanish capital of Guatemala has many fine examples of ecclesiastical architecture. The churches are picturesque ruins today.

member of the royal family of the Quichés who had learned to use the Roman alphabet in writing his own language. It was translated from the Quiché language into Spanish in the seventeenth century by Father Ximenez, a Dominican priest. The book relates the doings of the gods and the creation of the world. In one passage it tells of a battle between a giant and two demi-gods during which the giant has his teeth broken. Afterwards the demi-gods come to him disguised as medicine men.

"What ills do you cure?" asks the giant, holding his aching jaw.

"We extract maggots from the teeth to make them stop aching," answered the false medicine men.

"Then cure my toothache," said the giant.

"That we will do," replied the others, "for it is only maggots that cause the pain. We can even pull your teeth and give you new ones of ground bone."

Then the false medicine men pulled all the giant's teeth and put out his eyes.

In the story called the Horned Serpent p. 124, there is again a reference to a maggot as the cause of toothache.

The tales which follow, like the beliefs already described, are not an exclusive possession of the Kekchis, but seem to be the common property of all the tribes of Guatemala, of which there are no less than eighteen. They are also well known among people of Spanish descent or of mixed blood.

In reading these tales it has occurred to me that they contain elements from three different sources: some are purely aboriginal, others appear to present European characteristics and to be derived from European sources, while a third group has a flavor so distinctly characteristic of African folk tales that they would seem to be African in their origin. It is necessary, however, to be cautious in reaching such a conclusion, for it is not always easy to classify these myths and assign them with certainty to their several origins. Some of those which at first sight appear European in character are found to contain allusions to native beliefs and to reflect the native mind. It must be remembered that they were related in the Kekchi language and the versions which I give were rendered first into Spanish and then into English.

Without attempting any analysis of these myths, I give the

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readers of the JOURNAL several selections which illustrate the three types to which I refer.

The first myth, which has the moon for its subject, has been received in two versions which are so interesting that I present them both. These I believe to be entirely aboriginal. The same is true of the Horned Serpent. The five that follow belong to the group in which European influence is suspected and the last two appear to be African.

G. B. G.

LI POO

(THE MOON)

THERE was a great cacique in the land and he had a beautiful daughter. He loved her so much that he would never allow the sun to shine on her. When the sun heard this, he was so angry that he decided to steal the girl and make her his wife.

When the cacique went to the forest to shoot wood pigeons with his blowgun, the sun borrowed the turtle's shell and held it in front of his face in such a way that it cast a shadow. While the girl was sitting in this pleasant shade, the sun threw the shell over her and sent one of his rays down to fetch her.

When the cacique came home he was so angry at the loss of his daughter that he decided to shoot the sun. The best gun maker was ordered to make the biggest and the finest blowgun ever seen. So he went to the pubché tree, which grows like the bamboo, and cut off the largest stalk. He worked so diligently that he had all the pulp out of this stalk before the boys he had sent to bring the bark of the sandpaper tree returned. Then he rubbed the gun most carefully with the bark of the sandpaper tree. The gun maker could not do all this work by himself, because it was a great big gun and he had many people to help him. After the gun had been rubbed until it was perfectly smooth inside and out, it was laid away to season. All this time the shot makers were busy forming great balls of clay and putting them to dry, while the cacique was just as busy saving all the breath he could to send one of those balls through the long straight tube of the blowgun clear to the sun.

At last the gun maker pronounced the gun ready. Then the weavers wove a network of bark around it. The rope makers tied thick ropes made of vines to this network, and the strongest men took hold of these ropes, and pulled, and hauled, until the mouth of the great gun rested on the top of the highest mountain in the land.

When the shot maker put the hard round ball of clay in the gun, the cacique came from his palace, puffed out with saved-up breath. Just as he put his lips to the gun and drew a deep breath to send the ball forth, the sun threw a handful of red pepper into the muzzle of

the gun which made the cacique cough, and he coughed and coughed until all his admiring subjects coughed too, and this is how whooping cough came to Guatemala.

As soon as the cacique got well he said, "Now indeed, my faithful subjects, shall we shoot the sun." Of course the sun threw more red pepper into the muzzle of the gun, but this time the cacique did not cough, for you know one may have whooping cough only once in a lifetime. So instead of coughing as before he sent the ball forth and it struck the sun so hard that he dropped the girl, but she didn't fall at her father's feet. She fell into the sea, miles and miles away and broke into many pieces. Each little piece of her mourned and cried for the beloved sun in such a distressing manner that all the tiny silver-scaled fish felt sorry; so they went to work and gathered up all the little pieces and patched the poor girl together as best they could. They were such kind-hearted little fish that each one put some of his silver scales over his own particular patch. Then these good little fish gathered around the girl and tried to lift her up to the sun, but they couldn't do so, until one of them said, "Let each of us take his neighbor's tail in his mouth and form a long rope of which we can weave a mat." The great shiny mat swam under the girl and gave a big jump up to the sky. The heat of the sun was so great, his light so strong, that the little fish could not take the girl right to him as they wished, but they stuck her up in the sky and were hurrying home when they lost their way and had to stay up there too. Any clear night if you look up at the sky you can see them, for they form the great white streak [the milky way]. Now these little fish didn't do what they started out to do—that is, take the girl back to the sun—but they did the very best they could and so we have the silver moon to shine at night. For the girl and the moon are one and she continually follows the sun and no doubt still hopes to overtake him some day. Have you never noticed that she sometimes nearly catches up with him and they go down in the west almost together? The sun may really want to wait for the moon, but no matter how much he wants to wait he is not going to, for he knows that if he loitered he might not be on time in the morning to wake the birds.



FIG. 79.—Ruins of the church of the Recolection, at Antigua, Guatemala. The men on horseback in the foreground are ladinos, mixed Spanish and Indian.



FIG. 80.—The Governor's palace in Antigua, Guatemala.

LI POO

(THE MOON)

ONE day the sun (Li Cagua Saque) fell in love with the daughter of a great man (Hun Nim Li Cagua) and in order to get possession of her he transformed himself into a humming bird (Pap Zunun) and flew among the flowers of the tobacco plants that grew about her father's door. Soon the girl, whose name was Matactin, observed the bird and begged her father to shoot it for her. So he brought his blowgun and shot the bird with a ball of clay and it fell to the ground as if dead, but great was Li Nim Cagua's surprise when he picked it up to find that it was not even wounded. Matactin greatly admired the bird, and her father, yielding at last to her entreaties, gave it to her. It sat for a while on her outstretched finger and then walked up her arm to her shoulder, where it began caressing her.

Towards evening, when the girl was alone in the house, her father having gone out, the humming bird suddenly disappeared and the sun stood in its place. "Thou art mine and must ever follow me," he cried, caressing Matactin in a manner that filled her with fear. "I cannot go with thee," she answered trembling, "for the anger of my father would be more than I could bear." "Fear him not!" exclaimed the sun, continuing to caress her, "for I shall take thee to a place where he cannot find us." "It matters not where we go," declared the girl, "he can see us with his far-seeing glass and shoot us with his great blowgun." "Show me the far-seeing glass and the great blowgun," demanded the sun, and when Matactin led him to where they were, he blacked the glass with smoke, put powdered chile into the blowgun, and went away taking his beloved with him.

When Li Nim Cagua returned, not finding his daughter, he cried, "To be sure, the humming bird was some ardent lover come in that form to woo her and he has won her and taken her away." Then his anger was great and he went in search of his glass. Great was his surprise when he could not see with it, but he soon discovered the reason, and freeing it from smoke, he looked and saw Matactin and Li Cagua Saque, her lover, down by the sea. His anger now knew no bounds and he hastily took up his blowgun to shoot them,

but no sooner did he put it to his lips than he fell down writhing with pain because of the chile that entered his lungs. He coughed and continued to cough, for he had whooping cough and all the people about him coughed.

As soon as the great man was better he again took up his gun to shoot the lovers, but just as he was about to send the ball forth, the lightning (Cagua Kauc) appeared to him and offered to kill them.

But the sun heard this talk, so he came with the girl from the sky again to the edge of the sea at a spot where there was a turtle (Kuk). "Give me here thy shell," demanded the sun of the turtle. "I cannot do so," replied the turtle, "because my shell is useful to me, and," he continued, "may you not forget to return it to me?" "I shall give it back to thee when I no longer need it," angrily replied the sun, and drawing near the turtle he took off its shell and putting himself into it disappeared in the deep sea. At the same moment the lightning struck Matactin and she fell dead, bathed in blood. Soon Li Cagua Saque came up out of the deep water and returned the turtle his shell. Then seeing the rich red blood of his beloved mingling with the water of the ocean, he ordered the dragon flies to gather it up and put it in thirteen tinajas (water jars). Then he commanded the masons to make a big fountain and disappeared, but at the end of thirteen days he returned and seeing the fountain completed he poured the first tinaja of Matactin's blood therein, and there came forth from the fountain the terrible snakes called icbolay. When he threw the contents of the second tinaja into the fountain, swarms of the chupil, a poisonous worm, crawled out. The blood of the third tinaja called into being great hordes of the snake called bacuel. The blood of the other nine tinajas when poured into the fountain likewise produced horrible reptiles, but when the contents of the thirteenth tinaja fell into the fountain Matactin came forth in all her youth and beauty. Thereupon Li Cagua Saque called a stag and commanded him to conduct her to the sky.



FIG. 81.—A scene in the ruined city of Antigua, Guatemala. The volcano de Agua is in the immediate background.



FIG. 82.—A wayside inn in Guatemala.

THE HORNED SERPENT

ON a certain day long, long ago there was a great trembling of the earth and all the people said, "The old witch is troubling the Horned Serpent under the ground, and in moving about he causes the earth to tremble." So they begged their cacique to have the old witch burnt in the market place. When the cacique's messengers went to the old witch's cave to get her she said, "Yes, dear people, I will go with you, but first I must bid my boatmen good-bye," and going to the picture of a boat she had outlined with ashes on the floor of the cave, she stepped into it and was rowed away. The messengers heard the splash of the oars in the water. Then all was quiet. The cacique was very angry when the messengers told him how the old witch had embarked and disappeared before their very eyes, but as the earth trembled no more his anger cooled and he said, "Perhaps she may drown on her voyage and be thus killed by water instead of by fire." Before long, however, the earth began to tremble again and it trembled so violently that the birds, beasts and serpents forsook their mountain homes and went to the towns. Rivers left their beds and overflowed the plains, and the great Horned Serpent belched up smoke, flame and ashes through a big hole he made in the side of a mountain. Again the people sought the cacique and this time they cried, "Oh, great cacique, our master! The mighty spirit of the Thirteen Hills to which we pray is powerless to save our milpas unless you burn the old witch." So the cacique again sent his messengers in search of the old witch and when they had found her, she said, "Yes, dear people, even now I go with you. Do but allow me to find my ball of maguey thread." When she had found it she went peaceably with them to the great square where a crowd of people had collected to see her burned alive. When the death sentence was proclaimed she said, "It is true, oh great cacique! than whom there is none greater, that I can quiet the Horned Serpent of his restlessness, for it comes from a maggot in his fang, but I must go to the clouds for the remedy that will kill this xul-hé, this mouth worm, by casting out its sweetness and filling it with fear." The cacique, feeling that what the old witch said was true, gave her leave to go to the sky, so she drove a three-pronged stick into the ground, tied the loose end of the maguey thread to it, threw the ball into the air and climbed up the slender rope and never came down.

THE BOY AND THE SWORD

THERE was once a poor man who lived by tilling the soil. This man had one son who from his earliest infancy had expressed a desire to leave home and explore other lands.

"You are too little and too tender to leave me and wander about alone," said the father. "Wait until you grow taller and your sinews are hard, for then will I give you my great sword and permission to go forth and wander where you will." Hearing this, the boy went every day to the big sword and put forth all his strength to lift it—but he could not. However, he did not despond and straining his muscles day after day so increased his strength that at last he was not only able to lift the sword but to swing it around his head, and his father, seeing this, said, "Now, indeed, you have a man's strength and a man's right to go forth in search of adventure."

So the boy took the sword and joyfully set out. After he had walked for some days he came upon a giant throwing over great hills and said to him, "I go in search of adventure. Come and join me." And the giant, whose name was Bota Cerros [Hill Thrower], went gladly with him. After these two had walked for some time they met Bota Palos [Tree Thrower], who was running about uprooting trees and throwing them from him. "Come with us," said the boy to this giant, "for we walk towards the East in search of adventure." Bota Palos gladly went with them and the three walked on until they came to the foot of a live mountain. In this mountain was a great treasure which no one could reach, because none had been able to find the door that gave access to it. At the foot of this live mountain the three rested at a spot where a great herd of bulls and cows was peacefully grazing. "Tomorrow," said the boy to Bota Cerros, "you shall go with me to search for the door and Bota Palos shall stay here, kill a bull and prepare a soup for us when we return." Bota Palos killed a fat bull and when the rich soup was bubbling and boiling, a great Hobgoblin drew near and said, "Give me of what is in the olla, for I hunger." Bota Palos gave him a big gourdfull of boiling soup and flesh and bone, which he took at one swallow and demanded more, and he kept on asking for more and more until there was none left in the olla. Then he caused a deep sleep to come over Bota Palos



FIG. 83.—Indian women of Guatemala with water jars.

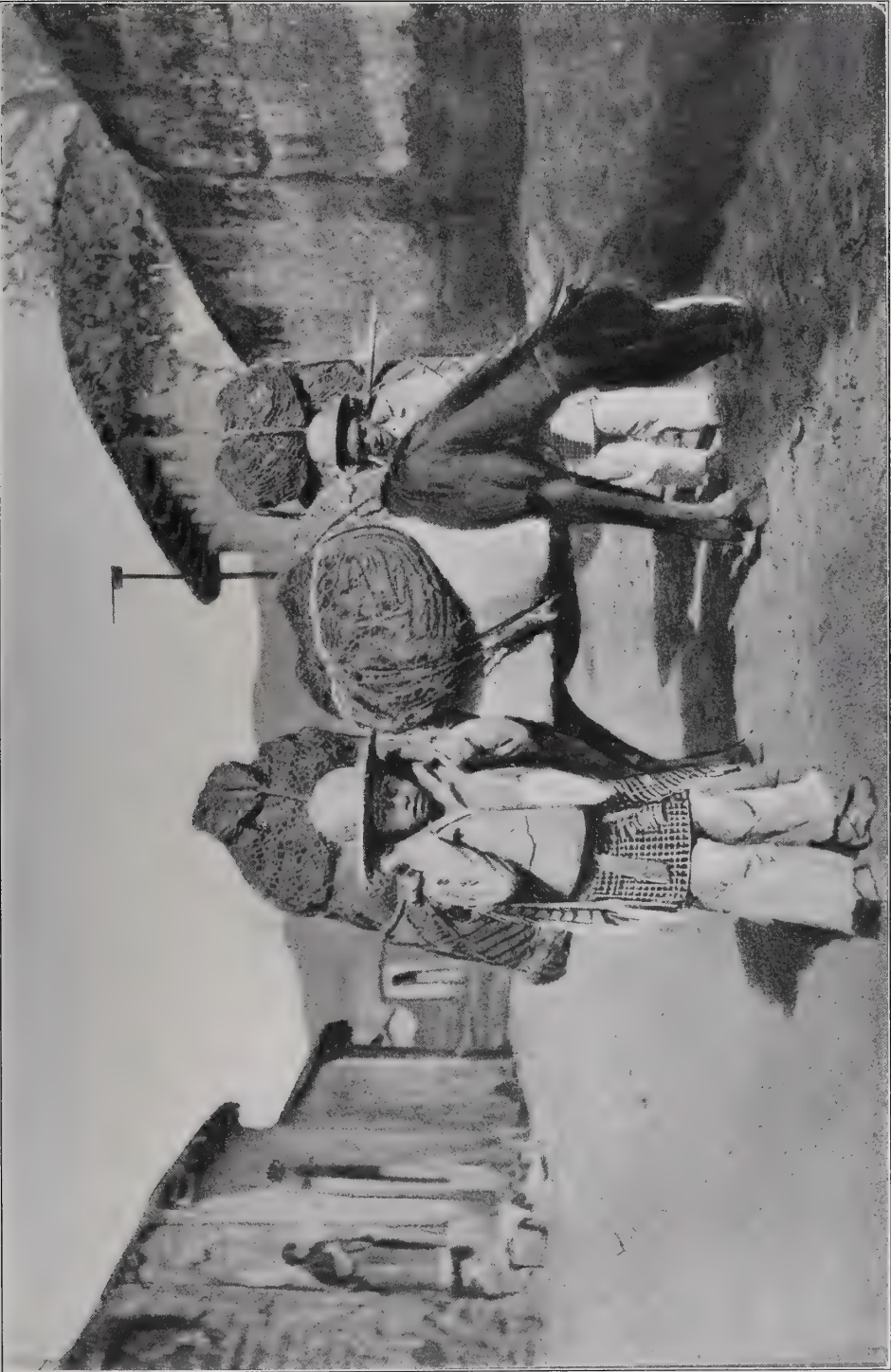


FIG. 84.—Indian charcoal carriers in a Guatemala village.

and went away. The boy and Bota Cerros returning, found Bota Palos still sleeping, so they awakened him and when he related what had befallen him, the boy said, "Tomorrow you shall go with me and Bota Cerros shall remain here to prepare our soup." On the next day the Hobgoblin returned, drank all the soup and put Bota Cerros to sleep. Then the boy said, "Tomorrow I shall remain here, and you two shall go in search of the door." When Bota Cerros and Bota Palos returned without having discovered the door, they found the boy wide awake and the olla full of soup. And after they had eaten and were resting, the boy said to them, "The Hobgoblin came to visit me and I gave him a gourdfull of soup, but when he demanded more I drew my sword and cut off one of his buttocks and then he ran howling away." "And where is the great ugly buttock?" asked the giants. "In your bellies," answered the boy, "for I threw it in to replenish the olla." "It is well," said the giants, and then they slept. When they awoke, the boy said to Bota Palos, "Now you must follow the drops of the Hobgoblin's blood, enter the door of the mountain and slay him. Bota Palos set out, but at nightfall he returned, saying, "It is true that I have slain the Hobgoblin, but beyond him is El Sombreron [The Big Hat] that I dared not attack." Then the boy said to Bota Cerros, "Tomorrow you shall go into the door of the mountain which is alive, kill El Sombreron and bring forth the treasure." Bota Cerros set off, entered the door, passed the dead Hobgoblin and came to the place where El Sombreron dwelt and after a mighty fight slew him, but beyond El Sombreron was El Sisemite that Bota Cerros dared not attack, so he returned to his companions and said, "El Sombreron I have slain, but El Sisemite I dared not attack, for fear of him weakened my arms." Then the boy said to Bota Palos and Bota Cerros, "You two remain here and I shall go and slay El Sisemite, for with my good sword I am without fear." The boy slew El Sisemite, that in dying so screamed and yelled that the hills trembled, but beyond El Sisemite in a great deep cave dwelt a giant, the owner of the live mountain. So the boy called Bota Cerros and Bota Palos to him, and seeing the dead Sisemite they said one to the other, "This boy is mightier than we and only by artifice may we slay him and get possession of his sword." "Now," said the boy, "we shall make a great rope." So the three set to work and twisted a rope of roots and bark—and the boy let down by the giants came to the bottom of the cave where Dientes Grandes [Big Teeth] lived. His eye teeth reached his belly and his stomach teeth touched

his eyes, and his sinews stood out in great knobs all over his body. With one stroke of his sword the boy cut off this monster's head. Then he freed a beautiful princess, the daughter of a mighty cacique, that had been held in captivity, and filling his bag with jewels and treasure, slung it over his shoulder. Then he took his great sword and the beautiful princess in his arms and having tied the rope about his waist called to Bota Palos and Bota Cerros to draw him up. "The flesh of the Hobgoblin has so weakened our stomach that we have no strength," answered these giants, "to lift such a weight. You alone, the sword, the princess or the treasure we can haul up, but any two of you are too much for us." "So be it," said the boy, who then tied the rope around the girl, who was drawn up by the giants. They also drew up the treasure and after it the sword, but when they had done this they hurled a great boulder into the door of the live mountain and prepared to depart. Bota Palos took up the princess, Bota Cerros the bag of treasure, but not even their combined strength could raise the sword from where it lay. The boy, finding himself a prisoner, walked about the cave of the dead giant Big Teeth until he came to a place where an old witch lived and when he had told her his trouble she said, "I will lend thee my magic horse which will take thee out by my own door." The horse of the witch took the boy from the cave, but left him lost in the woods not knowing which path to take. So he wandered about until he came to the place where the Duende lived, who told him that Bota Palos and Bota Cerros by shouts and yells had called the other giants about them to see if among them there might be one stronger than they who could lift the sword. Then the Duende pointed out the road to the blocked up mouth of the live mountain and changed him so that the giants would not know him when he arrived there. "I am come," cried the boy, "to lift up the sword." And the giants, seeing him so little, said, "Lift it then," and he lifted it and swung it round and round until he had cut every giant in two. Then he picked up the bag of treasure, took the princess by the hand and they walked towards the east until they came to her father's palace, where they were married.

DUENDE GIFTS

THE Duende can grant any request no matter how extravagant, if one takes the trouble to go alone to the forest and ask him in good faith. Of course one must be able to recite the proper incantation without leaving out a word. The moon must be just right and above all the Duende must be in a good humor. But even then his gift often brings about some unaccountable change that defeats the very purpose for which it was asked.

A long time ago there lived in the hill-encircled town of Tzalamha a poor young man who was so hospitable that his door always stood open and his only regret was that the smallness of his hut would not permit him to entertain the whole town at once. So he learned the incantation and went all alone to the forest on the dark of the moon, and the Duende must have been in a very good humor, for he immediately granted his request for sufficient money to build a castle big enough to accommodate all his friends at once. This happy young man then selected a beautiful site for his castle and while the first stones were being laid his heart swelled with joy at the thought of the pleasure that other people should find under his roof, but when the walls were about half done he began to like to be alone and long before they were finished he felt such dislike for his fellowmen that he even went out of his way to avoid them. And when the castle was finished even to the last stone on the turret he lived there entirely alone except for his sad-voiced wood pigeons. One night a poor old man overtaken by a storm knocked at the well-bolted door of the castle and asked for hospitality. The owner of the castle told him, "Begone, go away from here! Some fool in the village below will give you shelter." But the poor old man was tired and wet, so he said, "Surely, master, you will not drive me forth in such a storm! Do but give me some little corner," he pleaded, "for I shall go on my way as soon as the moon rises and drives away the clouds, from which the rain is pouring." But the owner of the castle still said, "Begone, begone from here!" and seeing that the old man lingered, he angrily added, "I wish the road to this castle would grow up, so that no man could find his way to my door." Then the old man, who was the Duende under one of

his many forms, walked sorrowfully away under the pouring rain, and immediately the castle began to sink. Slowly, slowly it went down and it kept on going down until only the turret was visible. At last that too disappeared. Though today no sign of the grand castle that stood on the top of the beautiful pine-covered hill is to be seen, the people of Tzalamha know that it once was there, for their fathers told them so, and they know that it still exists intact in the heart of the hill, for if one pauses at high noon any day as he walks along the road that lies at the foot of the hill he can hear the owner of the castle begging him most piteously to come in and visit him, and it is known that he still keeps wild pigeons, for the flutter of their wings as well as their gentle coo-ru-co is distinctly heard. The people know all these things, but they also know that the Duende set a great big horned serpent to guard that sunken castle, and that if one takes so much as a spadeful of earth from the hill around it this serpent will come out of the ground and go into the river. His great size will cause the river to overflow its banks and inundate the town and the people who escape drowning will die by pestilence.

THE DUENDE GIRL

ONCE there was a little girl. One day this little girl, who had been playing down by the brook, ran into the hut where her mother was grinding corn and cried, "Nana! Stop grinding and look at all this nice new money I bring." When the mother looked she saw only leaves in the child's hands, so she said, "Not nice new money I see, but dry leaves of the ec tree." Then the little girl sat on the earthen floor and cried. The mother had finished grinding and was sitting at her loom when the little girl again came in from play calling, "Nana! Stop weaving and look at my beautiful rings." Now the mother's heart was troubled when she saw that each of the child's fingers bore rings of corn husk and she sighed as she said, "Yes, yes, little sweetheart, rings of corn husk." Then the little girl sat down again on the floor and cried until she fell asleep.

When the little girl's father came home after his day's work in the milpa was over, the mother told him what had happened and he was as troubled as she, for they knew that their little daughter was loved by the Duende and that unless they could free her from his attentions, she would never be able to distinguish the false from the true and would die young.

The little girl wore the Duende rings and played with the Duende money until she was a big girl and all this time her parents were sad and uneasy.

One day as the girl sat weaving she said, "I wish I had some nice sweets." Immediately a shower of sweets fell about her from the rafters of the hut, but when she offered some of them to her mother, they changed to dry shells of the corozo nut.

Years passed. The Duende always gave the girl just what she asked for, but his gifts seemed destined for her alone, for whenever she attempted to share them with anyone else they changed to something worthless.

At last a young man, a strong, straight, bright-eyed, red-skinned lad, fell in love with the girl and his parents sent presents to her parents and in due time the young man was accepted as the girl's suitor.

It was understood that when the harvest was over the young people should drink the betrothal cup and be married.

One beautiful evening after the last ripe ear had been stored in the corn house, the girl met her lover just as he was about to cross the threshold and after placing the guacal of chocolate to her own lips, offered it to him, but just as he was about to carry it to his mouth the foamy chocolate changed to muddy water. Casting the guacal from him he exclaimed, "Thou art then a Duende girl." There were four sad hearts in the hut that night, but before the young man wrapped himself in his blanket and went to lie down in his own corner he said to the girl's parents, "I really and truly love your daughter and with your permission I shall go out even at daybreak to seek the old wise man of the mountain, for he, if anyone, can tell me how to free her from the Duende."

The old people gladly consented and they as well as the girl were up to see him start on his long journey. The Duende was there, too, for when the lovers were taking leave of each other he threw dust in their eyes and scratched their faces.

The young man was gone many moons and when he returned he said never a word. When night came they all retired as usual, but hardly had they fallen asleep when they were awakened by such music as was never heard before. First it sounded like the song of a bird and then like the laugh of a maiden, then like the breeze playing with the palm leaves. The patter, patter of the rain drops on the grass while the sun still shines was next heard, then the sunlight went out and there was only the drop, drop of the rain. The breeze came back and sighed for a while, then the wind rose and moaned and complained, to be quickly followed by a wailing that made the blood of the listener run cold.

All at once there was a sound as of someone breaking a reed, then all was silent. "Now," cried the young man springing up, "we are rid of the Duende at last."

Then he said to the girl and her parents that the wise old man of the mountain had given him a flute and told him to lay it at the door of the hut when night fell and that the Duende would play it, then break it and go away never to trouble his beloved again. Stepping outside, the lad picked up the pieces of the flute and showing them to the girl said, "I am thirsty. Give me to drink." And when the maiden brought the guacal full of foamy chocolate he drank their marriage draught.

THE MISER, THE GIRL, THE JAR AND THE FOOL

ONCE upon a time there was an old miser who had a beautiful jar. Now this jar was so very beautiful that everyone who saw it wanted to buy it, but the old miser thought no one offered enough for it.

One day when the old man came home from his work in the milpa, his daughter, who was grinding corn, said, "Three people, a gentleman, a man and a priest, came to see the jar this morning." "And what didst thou tell them?" asked the old man. "I told them to come back this afternoon," replied the girl. "Thou art a wise girl and thou hast made good use of thy wisdom," declared the old man, "and when these three return, as they surely will," he continued, "thou must say to each that thou hast decided to sell the jar for five hundred pesos without my knowledge. Tell the gentleman to come for it at eight o'clock tonight, the man to come at half-past eight and the priest to come at nine." The girl did as she was told and at eight o'clock the gentleman arrived, but just as the girl had finished counting the money he brought, there was a noise at the door of the hut, and throwing the money into one corner, she cried, "Go up in the loft, gentleman, for my father comes and if he finds you here he will kill you." So the gentleman hurried up to the loft and the man came in, but before he could get off with the jar there was again a noise at the door and the girl with the same words sent the man after the gentleman. The priest arrived at nine and was in a great hurry. He actually had the coveted jar in his arms when the voice of the miser was heard outside and the girl, seeing that the priest trembled with fear, said, "Put down the jar and go up in the loft." When the miser entered he asked, "Where is the gentleman's money?"

"There in the corner," answered the girl.

"And the man's money?"

"There in the corner."

"And the priest's money?"

"There in the corner."

After a pause the old man asked, "And the gentleman, where is he?"

"Up in the loft," answered the girl.

"And the man?"

"Up in the loft."

"And the priest?"

"Up in the loft."

"Thou art indeed a wise girl," said the old man, and putting the bag he carried on his back in the middle of the floor he set fire to it and soon the people in the loft died of suffocation, for the bag was full of dry pods of the red pepper plant.

"Well, well," chuckled the old man, "we still have the jar and three times five hundred pesos as well." "But we also have a dead gentleman, a dead man and a dead priest up in the loft," said the girl. "The Fool will dispose of them for us," chuckled the old man. "To-morrow morning early," he continued, "I shall go in search of him and tell him that thou hast sent me to ask him to eat breakfast with us."

Now the girl knew that the Fool loved her so much that he would do whatever she asked, so when they had eaten she told him that she and her father were sore troubled because a priest who had come to sup with them the night before had choked to death on a bit of tortilla and that, being frightened lest it should be found out, they had put him in the loft where he still lay, as they dared not take him out for burial." "Don't worry over a dead priest," said the Fool, "for I'll dispose of him if you solemnly promise to marry me when he is out of the way." The girl agreed to the Fool's proposal, but no sooner had he set out with the dead priest on his back than she sewed a cassock and put it on the gentleman. When the Fool returned and claimed his reward, the girl laughed and said, "Now don't think to deceive me, for full well I know that while I went to the brook to fetch water you sneaked in and lay the priest again in the loft." When the Fool saw the gentleman in the cassock, he scratched his head and said, "I buried you once and I'll bury you again." When the Fool had set out with the gentleman on his back the girl sewed another cassock and put it on the man. And when the Fool came back and said, "He'll lie where I put him this time, for I piled great stones on his grave," the girl frowned and said petulantly, "Why do you try to deceive me, for I know that while I was out gathering brushwood to bake the tortillas, you crept back and put the priest upstairs." All the Fool said when he saw the man in the cassock was, "Well, I'll wager he doesn't come back after I bury him the third time." As soon as the Fool set off with the man on his back the girl

called her father who was hiding near by. He came in and strapped the jar now full of money on his back. She strapped the grinding stone on her back and they set fire to the hut and walked towards the east. But they had not gone far when the old man caught his foot in a root, and stumbling, fell into a dark pool that lay alongside the road. The girl plunged in to try to save him, but with the weight of the grinding stone she sank too, and that was the end of them. The Fool, coming back and not finding the hut, followed the tracks of the miser and the girl to the edge of the pool, where he sat down and wept.

The Duende came along and taking pity on him changed him into the donde bird. And to this day the donde bird may be seen haunting the margins of pools crying, "donde, donde," "where, where."

THE ENVIOUS FARMER

THERE was once an old witch who lived in a cave and whenever she wanted to go anywhere she said, "Little cave, little cave, take me to such or such a place," and the cave immediately came out of the rock and took her there. In fact, this old witch could do as she pleased about everything and for this reason people did all they could to keep on friendly terms with her. There was once, however, a man who lost her good will. This man owned a beautiful hacienda with a plain covered with green grass, for no matter how often the cattle ate this grass, it grew up again in a single night. Through this grass-covered plain flowed a stream, but the farmer wanted a lake, because his neighbor had one of which he was always boasting. So this discontented man went in search of the old witch, who readily agreed to move the lake to his place. Arriving at the lake the old witch filled two gourds with water and set off towards the spot which the man pointed out to her, but when she was half way there she slipped, fell and spilled the water, which immediately formed a lake. The man was very angry then, because that was not the place he wanted the lake, so he spoke angrily to the witch, calling her a careless, awkward old woman. To all this the witch answered never a word; she just got up, took her gourds and went back to her cave. That night two of the farmer's calves fell into the lake and were drowned. The next night the same thing happened, so the man said, "I must fill up this lake, for if all the little calves get drowned, I shall soon have no strong oxen or patient cows." So he set to work and dug and dug, until he had made a great hole and though he threw all the earth he took from the hole into the lake, it never filled up, for as the hole grew the lake grew and it kept on growing until there was no hacienda left. And all the time it was growing cattle fell into it every night until at last the man owned a beautiful lake full of fish, but not one head of cattle nor a foot of dry land. The poor farmer was so sad at his loss and so sorry for his rudeness to the old witch that she at last relented and changed him into a blackbird, that always goes with the cows and sometimes sits on their backs.

WEE RABBIT SELLS A BAG OF MAIZE

WEE RABBIT one day found himself without money to buy food for his loving wife and numerous children. In vain he racked his brain for a scheme that might put him in funds. He lost so much flesh from worrying all day that his clothes were too big for him and his bright eyes became dim from loss of sleep, for he often lay awake most of the night thinking, busily thinking.

Wee Rabbit, knowing the scarcity of maize, said over and over to himself, "If I only had a bag of maize, I could sell it for a big price." Then he would rub his hands together, scratch his head, slap his thigh and ask, "How can I get this bag of maize?"

One bright moonlight night as he lay wide awake, the idea of selling a bag of maize he didn't have occurred to him, and it seemed so easy that Wee Rabbit wondered why he had not thought of it before.

At the third crowing of the cock he rose and hastily dressing himself, went forth in search of customers. First he came upon the hen busily looking for worms. "Good day, Aunt Hen!" he cried, then added gallantly, "I kiss your feet." But not until he had inquired for each member of her family did he offer to sell her a bag of hard yellow maize. "To be sure I'll buy it," said the hen, "and glad of the chance to do so, for though this morning I left a warm white egg in the nest and cackled as no hen ever cackled before, the woman gave me only three grains of maize, not enough to support one who like me always does her duty; so please excuse me if I go on scratching, for I'm very hungry." "Excuses are needless," said Wee Rabbit, bowing low, "for I am only your humble servant." The hen cackled her thanks for the polite talk and asked Wee Rabbit when she might go to his house for the maize.

"I have an engagement this morning," answered the rabbit, "but I shall be pleased to see you at my house—No! No! Not my house," he hastily added, "but yours, whenever you choose to honor it by your presence—at three o'clock this afternoon." The hen said she would be there on time and willingly gave the rabbit half the price of the maize, as he declared he needed the money urgently,

being on his way to the village to make some very necessary purchases. Then the hen began again her interrupted search for worms, singing merrily all the while, and Wee Rabbit went in search of the coon, who also paid something in advance on the maize, and the rabbit after telling him to call at his house for it a little after three o'clock said good-bye and walked away, and he walked and walked until he came upon a dog lying in the road.

"Good day to you, Uncle Dog," said Wee Rabbit in a hearty happy voice. "I'm at your feet." "Good day to you, Wee Rabbit," gruffly answered the dog, "I'm at your feet also, though I can hardly stand on my own." When Wee Rabbit asked what was the matter the dog said, "I am just back from a successful hunting expedition with my master. We went to the pleasant plains beyond the big mountains, but this morning the woman who grinds the maize gave me instead of my usual liberal allowance, only three small very thin tortillas, so I'm hungry as well as footsore." This was just the moment to offer the maize and the dog was so delighted at the idea of having a bag full of it all for himself that he gave Wee Rabbit half its price almost before he had finished asking for it, and Wee Rabbit, after telling him to go to his house to receive the maize between three and four o'clock, said good-bye and walked away listening to the jingle of the coins in his bag until he came to the river Hux, where a tiger was sharpening his claws on a great big stone.

"Well, well, Uncle Tiger!" joyfully exclaimed Wee Rabbit, "of all the people in the world you are the one I most wanted to see and all because it lies in my power to do you a favor." The tiger was hungry too, just as hungry as the hen, the coon and the dog, and consequently not in a good humor, so he asked in a gruff voice, "To do me a favor or to practice some more of your little pranks?" "I regret most sincerely," declared Wee Rabbit, "if my little jokes of the past caused you the slightest inconvenience and I am now come in all sincerity to offer you a big bag of hard yellow maize at a very low figure." "And gladly will I buy it," said the somewhat mollified tiger, "for I have not a grain of maize left." Then the tiger went on sharpening his nails and Wee Rabbit, seating himself on a little stone that lay near by, took the coins from the netted bag that hung from his shoulder and placing them in a row on the ground at his feet counted them over and over, and after each count he sighed so deeply and looked so sorrowful that at last the tiger asked, "What's the matter, Wee Rabbit?"

"Oh! nothing, really nothing," answered the rabbit carelessly, as if he were not thinking of what he said. Then hastily gathering up the coins and dropping them into the bag he added sorrowfully, "That is, nothing that can be remedied." The tiger was so delighted to see the rabbit in trouble and his curiosity was so excited that he insisted on knowing the cause of so many sorrowful sighs.

"Well, if you must know," said Wee Rabbit, getting up as if about to depart, "I sighed because——" Here he paused a long time, so long in fact that the tiger with ill-concealed interest said, "Because is no reason." Then Wee Rabbit repeated, "I sighed because——" and waited until he saw his uncle was ready to speak again, when he hastily added, "because I'm sad." "Sadness is the usual cause of a sigh," said the tiger, giving an extra touch on the stone to his longest and sharpest claw. "I always sigh when I'm sad. What I want to know is why you are sad." Here Wee Rabbit put his hand in his bag and jingling the coins said, "The truth of the matter is, uncle, that I may not, after all, be able to let you have the bag of hard yellow maize and the thought of your disappointment made me sad." "Well, you are a nice fellow!" growled the tiger. "And why can't you let me have the maize? That's what I want to know, and quickly, too."

"Now don't get angry, dear uncle," pleaded Wee Rabbit in his most winning voice, and reseating himself on the small stone he said that Mrs. Rabbit, like all the women folks, was so fond of dress that in spite of the hard times he had promised to buy her a new one of a very expensive kind. "But, dear uncle," he added, "I am in a bit of a fix, for I found on counting my coins that I lack a peso of having enough to pay for the dress, that is, for the particular one that Mrs. Rabbit wants, unless you give me a peso in advance." Here the tiger stopped sharpening his claws and looked very grave, for he didn't want to lend Wee Rabbit one quartillo, much less the sixteen that go to make up a big round peso, so after thinking a while he asked, "Well, suppose—just suppose, mind you—that I do not care to advance you the peso?" "Dear uncle, I have not asked you to do so," responded Wee Rabbit, making a sweeping bow, "nor is it necessary that you should do so, for I am sure that if I go to the hut of the hunter and offer him the maize he will advance even two pesos."

"To the hut of the hunter, indeed," growled the tiger. "To the house of a fool who does not know enough to lay a snare for a

cub, much less an old wise one like me. This fool keeps a trap set for me all the time, for he wants my beautiful skin!" Here the tiger looked over his shoulder at his nice black and yellow coat. "It would not be very good for you if at last he got it," remarked Wee Rabbit carelessly as he chuckled to himself. "Perhaps not," consented the tiger, "but as these hard times have forced many to live without eating, some of us might learn to get on without skins." Wee Rabbit liked to hear his dear uncle talk, so he sat down on the little stone again and kept quiet while the tiger said, "To the hut of the hunter you will go then and offer him a bag of maize just as if you did not know that he is the greatest enemy of all us folks. I know full well that he would like to skin me, and no doubt even your ugly little fur would not come amiss and I hope he gets it if you go there." "Be that as it may," said Wee Rabbit, "I must run the risk," and rising, he was just about to say good-bye, when the tiger took a peso out of his pocket and said, "Don't go there; here's the amount you require and I'll call for the maize at four o'clock." But Wee Rabbit waved his hand and said, "Put up your money, uncle, for you took it grudgingly from your pocket, and it is a rule of mine never to accept what is unwillingly offered; so good-bye, I must be off!" and he walked briskly away, but before he had gone far the tiger ran after him and begged him to take the money. "Take it," he urged, "if only to please me, for I cannot bear the thought of the cruel hunter getting that bag of hard yellow corn." "Just to please you, just to please you, then," said Wee Rabbit, taking the coin from the tiger's extended hand and dropping it into his bag. "Just to please you," he repeated, "whom I would do anything to oblige, indeed I would," he added. "Until four o'clock, then," said the tiger, turning to depart. "That hour will suit me admirably," declared Wee Rabbit, "but don't come before that time," he added, "for I can't get back sooner from the village." But Wee Rabbit didn't go to the village. He went to the hunter's hut and before he left there he had another peso in his bag and the hunter had agreed to go to his house a little after four o'clock to kill a great big tiger. Wee Rabbit had to hurry to carry out his plan, so he took a short cut to the nearest of his many houses and he ran so fast that he was there in time to fill a bag with gravel, tie it up with a bit of bark and stand it by a big hollow log that lay in one corner of his house before the hen arrived.

"Well! Well! You are just on time!" said Wee Rabbit,

greeting her, "but I was waiting for you. See," he continued, pointing to the bag, "there is your hard yellow maize." The hen was filled with delight which changed to dismay when the rabbit added, "but there is a little complication, for Uncle Coon, whom I know to be an enemy of yours, has just sent me word that he is coming immediately to visit me and if you start home with the maize now you'll be sure to meet him." "To be sure I shall," said the disturbed hen. "And next to the opossum he is the one I most fear. Where shall I hide?" she continued, completely losing her head. "Fly up on a beam and sit quietly there until he goes," said Wee Rabbit. "No! no!" cried the hen, "for each of my feathers would stand on end the moment I caught sight of him and from sheer fright I should fall into his clutches." "Even now he comes," cried the rabbit, looking down the road and wringing his hands. "Hide! hide quickly, Aunt Hen," he implored, and the hen, seeing the hollow log, ran into it just a moment before the coon entered. "You are punctual," said the rabbit, greeting the coon, "but not more so than I, for there is your bag of hard yellow corn," but just then the deep barking of the dog was heard and the coon rushed into the hollow log, where he was glad to find a nice fat hen.

Before the rabbit and the dog had time to exchange greetings the tiger came roaring along and the dog too sought safety in the hollow log much to the coon's dismay.

When the tiger entered and demanded his maize, the rabbit, pointing carelessly to the bag, said, "There it is, Uncle Tiger, and as you see it is good measure, for the bag is full to bursting." But just as the tiger was about to take it on his back, he lifted his great nose into the air and sniffed. "What is the matter, uncle?" asked Wee Rabbit, just as innocently as if he did not know that the tiger smelt the hunter who was so near that the tiger lost no time in getting into the log too. "Well, Wee Rabbit, where's the tiger?" asked the hunter. "Over there in the log," answered the rabbit and while the hunter was sharpening his machete the rabbit with the netted bag hanging from his shoulder ran away to the one of his many houses where Mrs. Rabbit and the children lived and he was so well supplied with funds that he not only bought Mrs. Rabbit a new dress but a beautiful tupui (headdress) as well and sandals for all the children, and there was still so much money left that the whole family had cheese and white bread to eat with their black beans for ever so long.

TENIENDO LA PEÑA

(HOLDING THE STONE*)

WHEN the rabbit left the wolf one beautiful morning, he started over the mountains to visit his brother and he should have been with him early in the afternoon, but it was sunset before he arrived. It happened in this way.

It was very hot about noon and Wee Rabbit stopped in the cool shade of a great stone that hung over the road to eat his luncheon. This stone, called Li Nim Pec, or the great stone, looked as if it might break loose from the almost perpendicular mountainside, and fall with a crash at any moment.

Whenever Wee Rabbit was going off on a trip, Mrs. Rabbit would put a good supply of thin hard tortillas in his netted bag and she always saw that his palm leaf umbrella was in good condition during the rainy season. But fair weather or foul, the last thing she asked him when they said good-bye was, "Hast thou thy little pitcher?" for without the little pitcher he could not heat drinking water, and if he took it cold he would be sure to have cramps in his stomach. So this noonday he gathered together a few twigs, struck fire with his flint and steel, and put his little earthen pitcher of water to boil before he sat down to eat. He most carefully chewed his corn cakes, and after he had quite finished eating, he took a big drink of warm water. Then he put all his things back into the netted bag, slung it over his shoulder and really intended to continue his journey immediately, but the shade of the stone was so cool and inviting, the sunshine so hot and the insects were singing so sweetly that he decided to have a siesta. So he lay down and slept until he was awakened by the roar of a tiger. Now Wee Rabbit knew the tiger was too near for him to escape by running, so he jumped up and putting his shoulder to the edge of the great stone, stood as if exerting all his strength while he cried piteously, "What a hard fate is mine! For here I must die of weariness and thirst and all the world must perish with me. Oh! Oh!" he continued, "I'm tired, so tired." The tiger stopped a few paces off and asked, "What's the matter with you, Wee Rabbit?"

* When two are working together and one shirks, leaving the burden to the other, the people say of the worker, "He was left holding the stone." This is an everyday expression.

But Wee Rabbit, pretending not to hear, redoubled his cries, so the tiger drew nearer and repeated his question. "I'm almost too tired to talk," gasped Wee Rabbit, pretending he was going to fall, and with the tears streaming down his face, he sobbed, "Yes, even my loving wife and helpless babies must perish when my strength gives out." Here the tiger insisted on knowing the cause of such deep distress and the rabbit between sobs and moans said, "Unless this great stone is held in place it will fall and kill all the world and as I am dying of thirst and must soon fall down, the destruction is near at hand." The tiger thought silently for a while then said, "Let me hold the stone while you go to the brook and quench your thirst." "You are very kind, dear Uncle Tiger, indeed you are," said Wee Rabbit, "but I cannot allow you to hold this stone," he continued, "for you might let it fall and if you did——" Here Wee Rabbit stopped abruptly and trembled so violently that his dear uncle expected to see him drop down at any moment, and he was so terrified that he insisted on taking the burden on his own shoulder and he kept on insisting until the rabbit said, "Well, if you are not ready to die and sincerely wish to save the world, come this side and put your shoulder under the stone as I slip mine out." As soon as the change was effected Wee Rabbit fell as if exhausted at the tiger's feet and for a few moments his dear uncle thought he was dead, but after a while he revived a little and feebly said, "Do be careful, dear uncle. Stand just as you are until I come back, for I won't be gone long." Then Wee Rabbit hobbled off, but he did not stop at the brook—he jumped over it, made a big turn to regain the road and, as I said before, reached his brother's house about sunset.

When the rabbit didn't come back, the tiger feared he had fallen in the brook from excessive weakness, but being afraid to leave the stone lest death claim him too, he faithfully continued to hold it until he fell from sheer exhaustion and went to sleep. He was surprised when he woke to find that the great stone was in place and that the beautiful earth still existed. He lay still for a long while thinking, but at last he stretched, got up and said, "I always knew Wee Rabbit was a fool," and added, "if he's dead it's hard on him but good perhaps for some other people."

NOTES

Mr. George G. Heye, Vice-President of the Museum, excavated during the summer a mound at Nacoochee in White County, Georgia. It was a flat top mound about seventeen feet in height and one hundred and forty feet in diameter. In the upper part of the mound were found a number of skeletons, together with fragments of incised pottery, pipes, copper ornaments and beads. The latter prove that the upper part of the mound is post-Columbian. In the lower part of the mound were found stone graves which were of an earlier period than the upper burials and appear to be pre-Columbian.

Mr. Heye has continued his archæological expeditions in the West Indies throughout the summer with marked success. Mr. M. R. Harrington in Cuba and Mr. Theodoor de Booy in Trinidad have both made discoveries of first importance.

A discovery of unusual interest for the archæology of New Jersey was made during the summer in the course of archæological investigations conducted for Mr. George L. Harrison, Jr. In a sand mound in a well-wooded district not far from Moorestown were found striking evidences of two distinct cultures and some evidence of a third and intermediate culture. In the surface of the mound were found grooved stone axes, fragments of pottery, quartz arrow-heads and a variety of implements characteristic of the Lenape Indians, the historic people of the Delaware Valley. In a depth of four feet below the surface were found a series of deposits consisting chiefly of banner stones and roughly chipped argillite blades. These rested on a stratum of white sand pronounced by geologists to be a glacial deposit. In a central position, at the same level, were the remains of a fireplace. Minute traces of bone were found also. Between the surface and this lower level were found argillite blades of finer and more finished workmanship than those below. Whether the mound was natural or artificial has not yet been determined. Dr. E. W. Hawkes and Mr. Ralph Linton, who made the excavations, are preparing a full report upon the discovery.

From Dr. Farabee has been received a large shipment of pottery which he excavated on the Island of Marajo at the mouth of the Amazon River. In this collection are a great variety of shapes and of decoration. The usual form of decoration, however, is the deeply incised conventional designs combined with raised figures freely modeled.

By last advices from Dr. Farabee he should be at the present time in the region of the Tapajos River, where he went in June to study the Munduruku Indians and other tribes of that region.

From the Egypt Exploration Fund the Museum has received a selected series of objects from the excavations at Ballabysh, in Upper Egypt.

Mrs. Archibald Barklie of Wayne, Pa., has presented to the Museum a collection of Indian beadwork and basketry obtained by her father, the late General Frank C. Armstrong, upon the Sioux and Blackfoot Reservations many years ago. The most interesting specimen in the collection is a girl's puberty robe of buffalo calfskin in which the conventional designs are applied in different colored beadwork instead of being painted, as is usual in specimens of this kind.

Mrs. Whilldin Foster has presented to the Museum a Japanese raincoat and hat.

Mr. James Henry Workman has presented through the Provost of the University an old English wine chest.

Through the generosity of Mr. John Wanamaker the Museum has acquired a valuable ethnological collection from the Eskimo of Coronation Gulf and Victoria Land. This collection was brought out by Captain Joseph Bernard, who sailed to Coronation Gulf in a small schooner in 1909 and spent five winters with the natives. Captain Bernard was at Coronation Gulf at the time of the arrival of Stefansson in 1910. The collection, which has now become the property of the Museum, was the first collection made among the people who, through Stefansson's writings, have become popularly known as the "Blond Eskimo." In the collection are many objects of native copper, such as knives, spearheads, arrowheads, fishhooks, icepicks and needles. There are also some objects made from iron acquired from civilization through other tribes. The collection contains clothing, stone cooking pots and stone lamps, horn cups,

fire-making apparatus, needlecases, sinew-back bows with quivers of arrows, a large number of harpoons, marrow pickers, combs and snow goggles.

The Museum has acquired by purchase an alabaster vase from the Uloa River in Honduras. This vase corresponds to those described and illustrated by Dr. G. B. Gordon in his report on excavations conducted by him in the Uloa River in 1898 for the Peabody Museum. The vase acquired by the Museum is the largest and most elaborate vase of this type that has been found. It was picked up by a native on a site which was discovered by Dr. Gordon in 1897. This site lies in the bank where the river cuts through the alluvial plain. The relics occur at a depth of many feet. Each year the river, during the flood, exposes, by tearing down its banks, a new section of the alluvial strata containing many objects of stone and pottery.

During the summer the Museum acquired by purchase a large and unusual collection of North American ethnology containing many rare and valuable specimens from the Indians of the Plains, California, from the northwest coast of America and from northern Alaska.

Two lecture courses have been arranged for the season of 1915-16. The first course, which will be given on Saturday afternoons, will deal especially with travels and explorations which have had for their specific object the study of primitive peoples or the excavation of ancient cities. They will be liberally illustrated either by motion picture films or by the stereopticon. This course is popular rather than technical and will be open to members of the Museum and their friends.

The second course of lectures will take place on Wednesday afternoons and is especially designed for teachers in the public schools of the City and is open also to such classes from these schools as teachers may desire to bring. The subjects of the lectures will bear a close relationship to the study of history and geography in the schools of Philadelphia. Members of the Museum and their friends are also invited.

The lecturers chosen for these two courses are in all cases men particularly qualified to present their subjects in the best and most instructive way.

THE MUSEUM JOURNAL

Both courses of lectures will be given in the new auditorium. The Saturday course will begin on December 4th and the Teachers' Course will begin on January 5th. Following are the two programs as arranged to date. Other lectures will be announced later.

SATURDAY COURSE.

December 4. James Barnes, *The Wild Life of Africa*. The distinguished journalist, author and traveler, Mr. James Barnes, led into the heart of Africa one of the most remarkable expeditions of modern times. This expedition was especially equipped for the purpose of making motion pictures of the animals and of the wild tribes of men at home in the jungle. In this lecture Mr. Barnes tells the story of his experiences and accompanies his story with the motion pictures.

December 11. C. William Beebe, of the New York Zoological Park, *Travels in Tibet and other Parts of the Far East*. The personal impressions of a naturalist among primitive Eastern peoples. Illustrated by stereopticon.

December 18. Roy Chapman Andrews, of the American Museum of Natural History, *The Water Mammals of the Far North*. Mr. Andrews made an expedition under the auspices of the United States Government on a whaling ship into Bering Sea and the Arctic Ocean for the purpose of studying the habits of the whale, the walrus and the seal. The motion picture films tell the story of the normal life of these inhabitants of the northern seas, as well as of the Eskimo on their hunting expeditions.

January 8. Carl E. Akeley, *Glimpses of African Wild Life*. Mr. Akeley's expedition, which went out to study animal life of Africa, obtained remarkable results with regard to the human inhabitants as well as the wild beasts. The motion pictures present vivid glimpses of life in the jungle as seen by the naturalist and ethnologist.

January 15. Roy Chapman Andrews, of the American Museum of Natural History, *Japan*. During his varied experiences as a scientific investigator, Mr. Andrews spent a year and a half in Japan, where he visited every portion of the empire. Beautiful motion pictures accompany his personal narrative.

January 22. James Chapin, of the American Museum of Natural History, *A Naturalist in Central Africa*. Though not an ethnologist, Mr. Chapin lived for six years in close communi-

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cation with the natives of Central Africa during his zoological investigations for the American Museum of Natural History. Few men are as familiar with the many phases of native African life as this young naturalist. Illustrated by stereopticon.

February 5. George A. Dorsey, An Anthropologist in China.

February 12. George A. Dorsey, An Anthropologist in India. Doctor Dorsey, until recently head Curator of Anthropology in the Field Museum of Natural History, made a journey through China and India with the object of obtaining motion pictures of various aspects of the life of the inhabitants. His wide experience as a traveler and student of primitive peoples and of human culture gave him exceptional qualifications for such an undertaking. Dr. Dorsey's reputation as a lecturer and as an authority on ethnology is well known.

March 18. Fay Cooper Cole, of the Field Museum of Natural History, An Ethnologist in Japan. Dr. Cole has for years been a close student of conditions in the Orient. He has made four visits to Japan to study the economic and social forces which have enabled the Japanese to realize one of the most remarkable civilizations that the world has seen. Illustrated by motion pictures.

March 25. Fay Cooper Cole, The Wild Tribes of the Philippines. Doctor Cole spent five years in the Philippine Islands under the auspices of the Field Museum of Natural History for the express purpose of studying the wild tribes in their native environment. During that time he visited many peoples and met with many unusual experiences. Illustrated with motion pictures.

TEACHERS' COURSE.

January 5. Edgar Thomson Shields, of Yarchow, West China, In Unknown China. The varied experience of a missionary during six years' travel and residence in the far interior of China. Illustrated by colored lantern slides.

January 12. Theodoor de Booy, of the Heye Museum, New York, Margarita Island. Travel and exploration in a little-known part of South America. Illustrated by stereopticon.

January 19. Herbert J. Spinden, of the American Museum of Natural History, Ruined Cities in Peten, Guatemala. Personal explorations among the scenes of an ancient and

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extinct civilization in Central America: the wonderful Maya cities. Illustrated by stereopticon.

January 26. Alanson Skinner, of the American Museum of Natural History, By Canoe to Hudson Bay. Dr. Skinner has made many expeditions in Canada in quest of Indian lore. In this lecture he relates his adventure among the Indians of the northern forests. Illustrated by stereopticon.

February 2. Charles Upson Clark, of Yale University, Travels in Spain. Prof. Clark's lectures on Spain, ancient and modern, have become well known throughout the country. No lecturer of the present day is able to present his subject in a clearer or more attractive way than Prof. Clark. In this lecture the distinguished classical scholar takes one through Catalonia, Aragon, old Castile and Leon, Madrid, Cordova and Granada, with the Alhambra. In Andalusia we are introduced to the life of the Roman and the Moor and in modern Madrid we are introduced to the bull fight. Illustrated by stereopticon.

February 9. Frederick Monsen, The Indians of the Painted Desert. Mr. Monsen's wonderful colored lantern slides of the Indians that inhabit the great southwestern portion of the United States have never been surpassed for picturesque charm.

February 16. Charles W. Furlong, Brazil, the Land of the Southern Cross. Mr. Furlong is an artist as well as a traveler and explorer with a gift for keeping his audience in close and sympathetic touch with the people and scenes which he describes. Illustrated by stereopticon.

February 23. Walton Brooks McDaniel, of the University of Pennsylvania, The Life of a Roman Woman. An entertaining and instructive sketch of the position of woman in the domestic, social and civic life of ancient Rome, with many illustrations taken from Roman sculpture and painting.

March 1. Mrs. Joseph M. Dohan (Edith H. Hall), The Earliest Civilization of Greece. Mrs. Dohan is one of the ablest scholars in the field of prehistoric Greece. By excavations which she conducted for the University Museum during several years in Crete she has made substantial contributions to our knowledge of the beginnings of civilization in Europe. Illustrated by stereopticon.

UNIVERSITY OF PENNSYLVANIA

Corapd.

THE MUSEUM JOURNAL

VOL. VI

PHILADELPHIA, DECEMBER, 1915

No. 4



PUBLISHED QUARTERLY BY THE UNIVERSITY MUSEUM

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All classes of members are entitled to the following privileges. Admission to the Museum at all reasonable times; an invitation to any regular reception given by the Board of Managers at the Museum; invitations and reserved seats at lectures; the Museum Journal; copies of all guides and handbooks published by the Museum and free use of the Library. In addition to the privileges to which all classes of members are entitled, Sustaining Members and Fellows receive, upon request, copies of all books published by the Museum.

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THE BUILDING

THE new section of the building was finished in October. The auditorium is already in use and the exhibition hall, which is the main feature of the new part, will be opened in February.

The construction just completed follows broadly the original architects' plans, approved in 1898 when the entire plan of the Museum building was laid out for gradual development by sections. Four years ago, in January, 1912, the same association of architects that was responsible for the original plan went to work on the details and specifications for the second section. For reasons of practical Museum administration and the adaptability of the building to its uses, they were asked to make certain important departures from the original design. These changes, as it happened, involved great differences in the principles of construction and gave rise to new problems for the architects to solve.

Architecturally the new section consists of a rotunda 90 feet in its interior diameter. In the requirements submitted to the architects, the lower part of this rotunda was to be used for an auditorium and the upper part for an exhibition hall, the latter to be surmounted by a dome. The entire height of this rotunda is 134 feet, divided as follows.

From the floor of the exhibition hall to the top of the dome measures 90 feet; from the floor of the auditorium to the ceiling in the center, 32 feet; from the foundations to the floor of the auditorium there is a basement space 12 feet in height in which the ventilating apparatus is installed. A special feature of the whole is the dome surmounting the rotunda. It was originally planned to support this dome on a series of piers, dividing the interior into a central space and an ambulatory, the piers in the upper section corre-

sponding to those in the lower sections. This scheme of piers with its ambulatory arrangement was a feature which it was desirable to eliminate, both in the auditorium and in the exhibition hall directly above it. To solve the problem which this change involved the architects decided to introduce into the construction of the circular walls eight pilasters supporting eight arches to carry the weight of the dome. As the diameter of the hall to be covered by the dome is 90 feet, the problem was not one of every-day occurrence. A new and modern method, which is in reality a revival of an ancient method, was adopted for the building of the dome itself and helped greatly in the solution of the problem. This method is what is known as the Guastavino construction. The units of this construction are tiles about an inch in thickness, laid flat in concentric circles and in overlapping layers from the spring of the dome to its apex. The roof rests directly upon this tile construction. There is no steel and no supporting trusses in any part of the dome or the roof. The ceiling of the auditorium, the diameter of which corresponds to that of the hall above, is constructed in exactly the same way as the dome above the great hall. The only difference between the two is that the top of the hall is a dome, the surface of which is a hemisphere, and the ceiling of the auditorium is a dome, of which the surface is a sector of a sphere, the center of which is many feet underground. The latter makes a very flat dome, which, however, supports the floor of the hall above and all of the weight which may be placed upon it, the maximum of which is fixed at a distributed load of 200 pounds per square foot of floor area.

In the complete plan of the Museum building as originally designed there are three rotundas, a larger central one and two smaller ones, each surmounted by a dome. The rotunda which has now been completed, is the one which on the general plan stands to the west of the large central rotunda. This central rotunda and the one which on the general plan stands to the east of it to balance the one that is finished, have not been constructed. They are to be in that part of the building the foundations of which have not yet been laid.

THE CHARLES CUSTIS HARRISON HALL

The principal hall in the new rotunda corresponds with the main floor of the building. It is 90 feet in diameter and 90 feet high in the center. The light is admitted through a lantern in



FIG. 85.—View looking into The Charles Custis Harrison Hall.

the eye of the dome and through a series of windows under the arches that support the dome. These windows are of glass that is hammered and ground. The walls are interrupted by the eight pilasters supporting the arches. These walls are of gray-brown brick and the ceiling of the dome is of tile of corresponding color. There is no ornament except four small conventional panels below the windows.

The electric lighting is accomplished by a series of thirty-six lamps placed under the lantern in the eye of the dome. Under these lamps is a diffusing sash of ground glass.

At a meeting of the Board of Managers held in the spring, a proposal which met with general approval was made to call this very dignified and monumental hall after the president, Mr. Coxe, out of regard for his great service to the Museum during a number of years and in recognition of his generosity in providing for the maintenance of the Museum as well as for contributing to the building funds and to the expeditions that are in the field.

At a stated meeting of the Board of Managers held on December 17th, Mr. Coxe altered this decision by proposing another resolution. Mr. Coxe on this occasion made the following remarks.

"Gentlemen: Last spring you were so good as to say that the large dome, now finished, should be called the Coxe Dome. I am truly grateful for that, but I feel there is another person, Mr. Charles Custis Harrison, who has done far more for the Museum and for the University than any one else. With your permission I would request that the name be changed from the Eckley B. Coxe Jr. Dome to the Charles Custis Harrison Dome and be thereby known henceforth."

The resolution was unanimously adopted by the Board and Dr. Harrison replied as follows.

"Gentlemen: When our director, Dr. Gordon, reported a few months ago that the new dome or hall had been practically completed, it fell to my good fortune to make the motion that this important addition to the University Museum Buildings shall be known as the Eckley Brinton Coxe Jr. Dome, and this resolution was unanimously and affectionately adopted by the Board. Shortly after that meeting, however, Mr. Coxe called to see me and said that it would be much more agreeable to him if a change could be made and the new hall be named after myself instead of after him. I

asked Mr. Coxe if he would be good enough to let the matter rest for a few months, with the hope upon my mind that after all Mr. Coxe would consent to have the hall named after him. My friend and classmate, Mr. Cadwalader, also called to see me with the same object as Mr. Coxe, and we too agreed to let the matter rest for a time.

"Naturally, I most gratefully accept the compliment and distinction which our president and you have offered to me this afternoon, and I therefore do so with my sincere and best thanks. May



FIG. 86.—Interior of the Auditorium.

I add that three motives animate me in my work for the Museum. The first is its public consequence to the City of Philadelphia and the humanizing and civilizing influence of the Museum. The second reason grows out of the agreeable companionship and relations which we all have together and which we have now had for a number of years, so that our joint work for the advancement of the Museum has become a happy association. We all understand each other's purposes, and each appreciates the work of the other. But

the third and dominating motive with me is a strong feeling of loyalty to our president, Mr. Coxe. His devotion to the Museum and his generosity not only to this institution, but to many other institutions in the City of Philadelphia, claim the loyal support of every citizen. Mr. Coxe and Gentlemen of the Board, I can only thank you again."

THE NEW AUDITORIUM

Among the needs that have made themselves increasingly felt along with the growing usefulness of the Museum, none has been more generally felt than the need of a good auditorium, of adequate seating capacity and proper ventilation. If it has taken many years to supply this need, it has at least been well and handsomely provided in the end.

The new auditorium was opened on December 5th with an audience of 1,200 people, which taxed it to its fullest capacity. The actual number of seats is 829, so that the rest of the persons present occupied the standing room. Several hundred more went away when they found the hall full. This audience listened for two hours to Mr. James Barnes, the well-known author and traveler, while he told of his journey across Africa with the accompaniment of his motion pictures.

There were no exercises connected with the opening other than a very brief address by the director, Dr. Gordon, who spoke as follows.

"It is my agreeable duty on this very pleasant occasion to extend to you on behalf of the President and Board of Managers of the University Museum, a very cordial welcome. This auditorium, which has been three years in building, is now ready to be opened and dedicated to the uses for which it was designed.

"It is a matter of general regret that the President himself should be unable to be present. His absence, unfortunately, is unavoidable. It is especially on his behalf that I am speaking and on behalf of his close associates in planning and providing for the construction of this hall. If these gentlemen could have spoken to you they could have told you how they worked together for the accomplishment of this splendid undertaking and they could also have spoken words of welcome that would, I am sure, have reached your hearts and made you warm towards this work that is being performed under these auspices for art, for science and for the people.



FIG. 87.—The Auditorium filled with classes from the Elementary Schools at a Wednesday afternoon lecture.

"It is impossible to speak of this work without associating therewith the names of President Coxe and Dr. Harrison, for their generous efforts are responsible for the fruitful results which you see and which it is your privilege to enjoy. I think that I accurately express their sentiments and the sentiments of the rest of the Board of Managers and of all of us, when I say that your presence here today is a source of great pleasure and satisfaction. It justifies and repays in a very large degree the efforts that have been made, and at the same time it gives encouragement to the future activities of the Museum, of which the functions of this auditorium will form an important part.

"These functions are to enable the Museum to enlarge its usefulness and to make proper provision for the Museum lectures, which it is our constant effort to render both instructive and entertaining.

"The architects are, I believe, to be congratulated on having worked out successfully a plan which answers so well the demands that were put upon them. From the design of the interior and its decoration, to the heating and ventilating systems, everything has been done according to the most approved methods of modern science, governed by the principles of design and combined with artistic treatment. The physical well-being of the audiences has not been considered less than their intellectual welfare.

"Some of you, I have no doubt, will remember, as I do, the old lecture room in the west wing of the building and the struggles which we enjoyed there for so long. I can remember, a few years ago, when audiences of fifty people or thereabouts listened with mild tolerance to the lecturers who addressed them, and I have a very distinct recollection of a day when I myself was the lecturer and I had the pleasure of addressing a handful of people, most of whom left before I was through. I have never been able to learn whether it was the bad air of that room or whether my audience had to catch a train. The thought that is uppermost in my mind is simply that the difference between that and this bears witness that we have not worked in vain.

"It is our confident expectation that this beautiful auditorium, which so auspiciously opens its doors today, is destined to a long life of increasing usefulness.

"The lecture programme, as you will have seen, contains some well known names and some that are not so well known, but all are chosen on account of their special fitness and because of some



FIG. 88.—The Auditorium filled with classes from the High Schools at a Wednesday afternoon lecture.

definite achievement by which they have added to the sum of human knowledge. The subjects are various, but they are all related to one definite theme, which is Mankind in its progressive development. This is the fixed idea that we have followed in the past and it has guided us in the present programme.

"Many of these lectures, as you may have noticed, have for their subjects, explorations which bring to our knowledge strange races of people and their natural environment. The distinguished lecturer who has been chosen specially for this very pleasant occasion is one of those fearless explorers through whose energy and resourcefulness the most inaccessible parts of the earth and its most unfamiliar inhabitants are brought right into our normal lives and made a part of our normal experiences. Mr. James Barnes, whose reputation as an author is perhaps even greater than his fame as an explorer, has penetrated some of the most difficult parts of the African continent, and by means of the moving picture camera and an inexhaustible fund of patience, is enabled to reproduce for our benefit the scenes and incidents of that remarkable journey. I have the pleasure of introducing to you Mr. James Barnes."

This was the first time that the hall had an audience in it and therefore it was the first opportunity of testing thoroughly the acoustic properties and the ventilation. In regard to the first, it was remarked that with the audience present, words spoken on the platform can be heard distinctly in any part of the room and that there is not the faintest echo. These facts had already been observed by tests in the empty room, the only difference being that when the room is empty the speaker on the platform speaking in low tones can be heard even more distinctly all over the auditorium than is the case when the seats are full. The acoustic conditions are such that under all circumstances it is easy for the speaker and agreeable to the audience.

The ventilating apparatus has proved adequate to the needs of the hall. It consists of an air-conditioning plant, in which the air is washed and tempered. It is then driven by fans into ducts which distribute it evenly under the concrete floor of the auditorium. Under each seat the floor has a round opening protected by a mushroom-shaped cap. Through these openings the air enters the auditorium under pressure, the temperature at which it enters being registered on a dial and subject to regulation. The temperature of

the auditorium is also registered on a dial in the machine room where it can be watched by the engineer. The ceiling of the auditorium is perforated by decorative grilles, through which the used air is ejected into a chamber which extends the full diameter of the hall. From this chamber the exhaust air is thrown through the walls of the building by means of four revolving fans.

By means of these devices the air in the auditorium is kept fresh and pure and at an even temperature when filled with people. The amount of washed and tempered air that enters the auditorium through the floor is 25,000 cubic feet per minute, or 1,500,000 cubic feet per hour. When there are 1,000 people in the room, therefore, each person is supplied with 25 cubic feet of air per minute, or 15,000 cubic feet per hour. These figures will serve to explain why the air in the auditorium is as sweet at the end of a two hour lecture as at the beginning even though more than 1,000 people be present.

The ceiling is a flat dome divided in panels radiating from a plain circular area in the center. Each panel is centered by an ornamental grille of white glazed tile for ventilation and bordered by a plain tile band, with a green semiglaze. All the rest of the ceiling as well as the walls is lined with a gray-brown tile, soft burned and porous. The lower four feet of the walls, however, have the same tile hard burned and provided with a thin glaze to permit of washing. The color of these is the same as the rest of the wall surface and the difference in the character of the tile can hardly be detected by the eye. The stage is built as an extension of the building southward and does not project into the room. Its walls are finished with the same gray-brown soft-burned porous tile, except the proscenium arch, which is finished in a soft green semiglaze tile and is bordered by a narrow band of brown tiles sustaining a running ornament.

The lighting is entirely artificial. In the center of the domed ceiling is a bronze sunburst; on the walls are eight chandeliers.

The booth for the lantern and motion picture machine is outside the three-foot brick wall of the auditorium which is perforated as the pieces of apparatus require.

The original design of the auditorium was somewhat different. It was to have been broken by a series of arches around the circumference dividing the space into an audience chamber and an ambulatory.

For good reasons this place was abandoned in favor of the one which has been completed but found a very complete solution of the difficult problems of construction which were thus presented to them.

THE MUSEUM AND THE SCHOOLS

For several years the University Museum has invited the teachers of the city to make use of the Museum by bringing classes of pupils to talks given in the exhibition rooms or in the lecture room. These talks have proved increasingly attractive and useful and consequently have been attended by larger numbers each year. This year, in addition to the usual programme, the increased facilities of the Museum have enabled us to offer a special course of lectures on Wednesday afternoons for the benefit of the schools of the city. These talks, which are upon subjects adapted to the ages and mental attainments of the pupils, are given by well known lecturers who are especially qualified for the task and who are engaged for the purpose specified.

Some of these lectures are adapted to the needs of the High Schools and others are adapted to the needs of the Elementary Schools. On several of these occasions the whole number of seats was reserved several weeks in advance. It is gratifying to find that the cooperation of the district superintendents, the supervising principals and of the teachers generally has been more pronounced this year than ever before and with this admirable and growing spirit of cooperation, we may expect that this useful work will be an increasing influence for good in the community. It will be the effort of the Museum to conform more and more closely in its selection of subjects, to the needs of the pupils and the desires of the teachers.

THE COPPER ESKIMO

WHEN Stefansson was making his ethnological researches among the Eskimo of Coronation Gulf, he met Captain Joseph Bernard, who, with his little ship the *Teddy Bear*, was already wintering nearby. This man, like most people in new or little known lands, traded with the natives and thus acquired a large amount of material representative of the native culture. This collection was recently acquired by the Museum, through the generosity of Mr. John Wanamaker, and now forms one of its most interesting ethnological collections. Its interest lies not only in the several new types and forms of articles represented, but also in the fact that it is the first, or one of the first, of the few collections brought from this little known part of the continent.

For their implements the natives depend so much on copper that they have been given the name "Copper Eskimo." It is among these people that Stefansson reported finding "Blond Eskimo."

Copper, however, is not the only thing which nature has supplied in abundance, for not far inland are large deposits of stone from which pots, kettles and lamps can be made. Driftwood also occurs. Seal in winter and caribou in summer are so plentiful as to be the main sources of food. And yet despite the presence of so many helpful things the life of the people is not always an easy one. In the winter there may be days or even weeks when it is so stormy or cloudy that it is impossible to go hunting, and on such occasions, hunger and even famine may prevail. In fact, a winter seldom passes without some of the natives having to eat skins and sinews which may have been stored up for clothing or bedding.

The dress of the Copper Eskimo, while much like that worn elsewhere in the Arctic, differs in detail. Both the men and women wear coats or frocks which are very much alike in cut, differing only in the hood, which for the women is large and for the men is short and small. The garment itself resembles very much the modern dress coat, except that this coat has a hood and is not open in front. The coats are made of caribou skin, the white skin being often combined with the gray to form a very attractive garment. The man's coat is usually decorated with a bone button in the small

of the back and sometimes with a number of strings worn at different places. For decorating the woman's coat, the ears and teeth of caribou and often the skins of small animals are attached to the back. In winter or cold weather two coats are worn, an outer decorated one with the hair side out, and an inner one with the hair in. For dancing and ceremonies much time and work are spent in preparing the clothing. One ceremonial woman's coat of gray skin is quite elaborately trimmed with narrow strips of red and black hairless skin and with white hide having the hair on. Quite similar to this coat in material and decoration are two hats which have in addition to the narrow strips of hide, a strip of loon skin with the feathers still on. On top of these hats one or two loon beaks stand upright, and at the back a weasel skin is attached.

Both men and women wear breeches of the same material and decoration as their coats. These breeches are much higher waisted than are those of other Eskimo. The men's extend from well above the waist to well below the knee, where they lap over the boots, two pairs of which are worn in winter. Inside of these boots next to the feet a pair of soft slippers is worn. One pair of well-made hairless moccasins is worn between the two pairs of boots and a second pair outside of them. The soles of both boots and moccasins are usually strengthened with a strip of leather sewed across the ball of the foot and another across the heel. This may make eight or ten thicknesses of skin under the feet. The women's breeches are tight fitting and extend only to the middle of the thigh, where they are tucked into the high boots or stockings which are tied to the belt. These garments, made with the hair either on or off, fit closely about the foot and ankle and then become larger and larger until at the top they may be nearly a yard around. Two pairs of these stockings with extra moccasins, as well as two pairs of breeches are worn in winter.

Stefansson's remark that "the clothing worn by these people is as irrational as any worn in civilized countries," is certainly well founded, for nothing but style or custom could endorse many of their garments. The man's coat with its short sleeves, which do not reach to the short mittens, and the small hood, which but partly covers the head, is certainly not the best sort of garment for cold weather. The boots of the women are so large as to hinder walking and also so loose as to readily admit snow. The men's breeches, not having puckering strings at the bottoms, leave the knee exposed.

And still more strange is the fact that many of the people prefer to suffer cold by wearing their regular clothing, than to keep warm in the long coats and warm gloves possessed by all of them and worn mainly in house building.

Aside from clothing, the articles made by the Copper Eskimo show much ingenuity, for with the simplest of tools, articles of remarkable workmanship are made. Several types of knives are used. The material available, the preference of the maker and the probable use of the weapon, determine its form. In addition to the bone knives which are used only in making snow houses, there are knives of copper and iron. There is a long copper knife made especially for snow cutting, but many prefer to use the dag or dirk-like knife with its double-edged metal blade and long handle. These dags and knives, like butcher knives, some with the ordinary style handle and some with a handle much longer, are used by the men in making snow houses and in cutting up game. A special knife is used for working wood and in making implements. This knife, with its short crooked blade and long antler handle, is much like the work knife used throughout the far north.

One other cutting instrument of great importance is the ulu or woman's knife. This ulu, with its curved blade of iron, copper, tin or even slate, is used in many ways, such as cutting up animals for food and skins for clothing. In eating, a ulu is nearly always preferred for cutting the meat. Especially is this true if the knife be of copper. The shank which connects the blade and the handle is made flat enough to allow deep cuts to be made.

In order to clean and soften skins, their inner surface must be carefully scraped and worked. For this purpose a pistol-shaped scraper of antler having a small fan-shaped copper blade is used. This sort of scraper is seldom if ever used among any other people. An adz is used in working wood and in making stone lamps and kettles. This small tool, with its sharp, well-made copper blade, attached to a handle of antler, is very much like those used in Europe in the Bronze Age. Another ingenious tool is a saw resembling a back-saw. This is made of a serrated piece of sheet iron riveted to an antler handle. Large pieces of copper are pounded into shape and sharpened to form chisels or ice picks. These blades are set into antler handles, which for the ice picks are cut slanting so that they may be attached to poles. With this new type of tool, holes are easily and quickly cut through the ice.

Fishing is carried on throughout the year by those unable to hunt the seal and caribou. Beside spearing fish, several methods of fishing are employed. The oddest of these is by using a large gaff of antler having two long copper prongs. This is attached to a long pole and lowered through a hole in the ice. Here it is held until the fisherman feels something touch the pole. Then it is quickly drawn up and, if successful, the prongs have caught the fish. In much the same manner a long barbless copper hook and sinew line are used. In this case a few pieces of bone are attached to the hook to serve as lures. A simpler form is a short line with a small hook and a separate lure. With these simple forms of fishing tackle it is often possible to secure large amounts of fish.

Seals are the main source of food in winter, so the men are well provided with weapons to secure them. The harpoon is the principal one used, but to it are added some minor articles such as the snow stick and seal indicator. Throughout the north the harpoons are based on the same principle, but differences occur from place to place. The harpoon used by the Copper Eskimo is composed of several parts. The shaft of wood three or four feet long, has a spur of antler spliced to one end to serve as an ice pick. To the other end is riveted a short shaft of bone or ivory having a socket in its end. Into this opening is fitted a rod of bone about eighteen inches long. The other end of this rod is pointed to fit into the harpoon head or, if necessary, to stab with. The heads are bone or ivory with a small copper or iron point. However, a few heads entirely of iron or brass are used. Through a hole in the harpoon head is attached a line of hide or braided sinew, by means of which the harpooned seal is retrieved.

Often in hunting the snow stick is used to locate the center of the hole through which the seal rises to breathe. The snow stick is a cane-like bone rod tipped with iron or horn. It is used mainly for testing snow to see if it is in the right condition for making snow houses. The seal indicator is a slender needle-shaped rod with a string and bone peg attached to its eye. After the center of an air hole has been located the seal indicator is thrust through the snow so that its tip is just below the water. Thus the seal, upon coming to the surface, raises the indicator. This warns the man, who quickly drives his harpoon into the animal. After drawing the seal to the surface and clubbing or stabbing it, the hunter pins up its wounds with bone pins, so that the blood will not be lost, attaches a line and drags his game home.

In summer, for hunting caribou, bows and arrows are mainly used. The bow with its case, ten to twenty arrows in a quiver, and a pouch or two of odds and ends, constitute an outfit. Black seal skin, often decorated with strips of white skin, is nearly always used to make the bow case and quiver. For carrying, these are attached to a bone handle or a strap. The bow resembles the one used by the Tartars. It is made of three pieces of spruce spliced together and backed with a number of cords of sinew. As this backing constantly demands attention to keep the bow at its best, a pair of sinew twisters for adjusting the backing accompany each bow. The arrows show great diversity, for there are seldom two alike. Points of bone, copper, iron or even brass are found. There may or may not be foreshafts, and barbs may not occur, or there may be from one to eight or ten barbs. Even in feathering no special method is used, as is the case among almost all other tribes. Arrows with no feathers, some with two or three half feathers and others with two entire feathers, are often in the same quiver. The feathers from almost all of the large birds of the north are used, but the feathers of the owl, loon and eagle are the most common. Another odd thing about the arrows is that nearly all of them are made of from three to eight pieces of wood. At first this seems to be due to lack of material, but this is not the case. A man will often take a straight stick and cut it into several pieces and then he will splice and glue these together to form an arrow shaft. The arrows average about three feet in length. This is much longer than the arrows used elsewhere in the Arctic region. The pouches attached to the bow cases or quivers contain parts of arrows, bone tubes for drinking purposes, bone pins or plugs to stop the wounds of dead animals, bone handles to attach to lines for drawing animals or sleds, pieces of sinew and other small articles.

For sewing and garment making the women of Coronation Gulf have several interesting articles, of which the scissors are the oddest. One pair has been carefully cut out of bone and strips of iron riveted on to form cutting edges. Another pair is rather crudely cut out of sheet iron. Needles of iron or copper are very valuable and scarce, so cases are made to contain them. A few years ago a needle was of the same value as a butcher knife or a complete bow outfit. The manufacture of a needle requires much time and skill, for after it has been pounded into shape and sharpened it may be broken in drilling the eye. The needle case is a caribou leg bone, which has

been cut off at each end, cleaned of marrow and decorated with a simple incised design. Through the bone is a strip of leather into which is thrust the one or two needles. At one end of the strap one or more hooks or toggles are usually attached. These serve to fasten the case to the belt or to hold the scissors or thimble. The thimble is of bone, open at the end, and pitted only over a small part of the surface. To the other end of the case strap may be attached bone implements used to pick marrow from bones or to crease with in making moccasins.

For fire making there are bags of squirrel or other skin, which contain two pieces of pyrites and a leather case of pussy willow down. Fires are started in the same manner that flint and steel are used elsewhere. Sparks are struck from the pyrites onto the down, which serves as tinder. The fire making outfits often include pouches made of the skin of birds' feet. These pouches contain moss or other material to serve as lamp wicks.

The lamps are similar to those used by other Arctic people. In size much variation is found, the lamps used on hunting trips are small, being six or eight inches long, while those used in the household may be as much as three feet long. The stone pots also show a wide range in size, some holding as much as four or five gallons. As several months are required to make a large pot, it is carefully repaired with copper strips if it becomes broken. Many of the pots in the collection show signs of repairs. A blubber beater made of musk ox horn is used by the natives to pound blubber so that it may be more readily used as fuel.

Large cups and ladles are likewise made of horn to use in serving the soup which forms part of every cooked meal. These cups in many cases have been broken and repaired by riveting a piece of horn over the broken place. A cup similar to the horn cups but cut out of stone is one of the new features of the collection.

Aside from the stone lamps and kettles used in the regular work, there are a number of toy pots and lamps for the children. Many other articles, similar to those found elsewhere in the far north, are included in the collection. Among these are the cup and ball game, wooden goggles, bone combs and bow drills.

B. W. M.

AN ATTIC BLACK-FIGURED PANEL-AMPHORA IN THE UNIVERSITY MUSEUM

IN 1896 the Museum obtained a small group of Greek vases, which are said to have come from the Greek Islands, especially Chios and Samos, are in their way among the most interesting possessions of the Mediterranean Section of the Museum. The



FIG. 89.—Attic black-figured panel Amphora. Obverse.

amphora which I wish to describe in this article (Figs. 89 and 90) is one of this group.

The shape of the vase is interesting. It has the neck sharply divided from the body and the designs in panels on each side. This is rather unusual, as the amphoræ with designs in panels are usually of an entirely different shape, with the neck running into the body

(Fig. 91). A vase of this shape would usually at this time, that is, in the end of the sixth century B. C., be left completely in the color of the clay and have designs in black figures on the red body. This would be called a red-bodied amphora (Fig. 92). Now the amphora shown in Figs. 89 and 90 has the decorative scheme of a panel amphora, and is in shape a modified form of the red-bodied amphora. But the red-bodied amphora is not, as a rule, so slender; it is larger and the neck is not so large in proportion to the body as in this



FIG. 90.—Attic black-figured panel Amphora. Reverse.

vase. This vase is in shape much more closely related to the characteristic form of the following period, when the designs were in red figures on a black ground, which begins in the next century, and which has been supposed to be peculiar to that period—the form known as the “Nolan” amphora, from the fact that they were first found in Nola, in Southern Italy. There are no examples of “Nolan” amphoræ in the Museum, but there is one at Memorial Hall, of which I give an outline (Fig. 93).

Another important feature of the vase (Figs. 89 and 90) is the decoration of the neck, with its three palmettes, of which the central one points downwards. The writer has been engaged for some time in making a study of the vases of this shape in the black-figured technique, which he hopes to publish soon. The conclusion which he has reached is that the vases of this shape can be divided into two classes, according to the way the central palmette points, one of which is considerably earlier than the other in date. Of the first class, which dates from the middle of the black-figured period, a good many of the vases seem to be by the same hand; of the second,

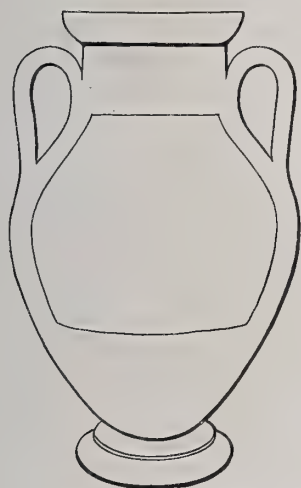


FIG. 91.—Typical panel Amphora.

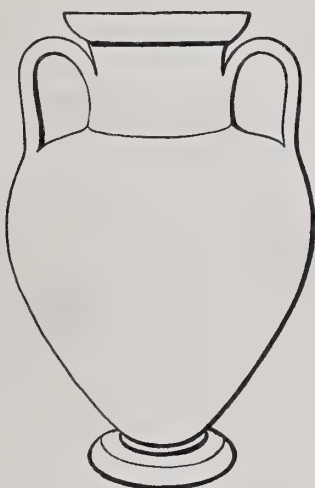


FIG. 92.—Typical shape of red-bodied Amphora.

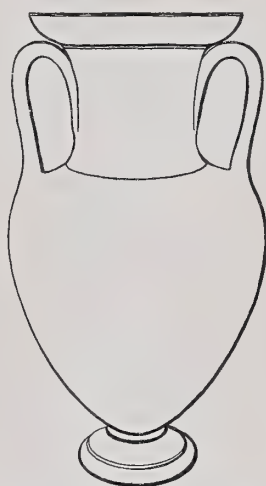


FIG. 93.—Outline of Nolan Amphora.

which seems to be contemporaneous with the early red-figured vases, nearly all can be positively attributed to one master.

This vase is one of the earlier group, as can be seen from the style of workmanship, which is the characteristic manner of the middle of the black-figured technique. Like the vases of this group, it has the center palmette pointing downward. Its height of 29.3 centimeters is also the average height of the vases of this group, the vases of the later group being on an average considerably smaller, seldom more than 23 centimeters high.

In its general scheme of design this vase, with its athletic subjects (boxing and throwing the discus), recalls a vase in the British Museum of this class, No. BI88, which substitutes musical for athletic contests. There is also an amphora in the Louvre which

shows musical contests. It is to the artist of these two vases that we should probably attribute this amphora. Other vases of this shape and class that seem to be by the artist of this vase are in Athens, Leyden and Naples, besides others in the Louvre and the British Museum. Though not an important specimen, this vase is of interest for two reasons. In the first place, it is of interest because, as I have hinted, it is possible to see the same hand at work in the collections of other museums. In the second place, this shape interests the writer because he believes it to be the direct prototype of the "Nolan" amphora shape of the red-figured period; for it is almost the identical shape, as a glance at the illustrations will show. Mr. H. B. Walters, whose "History of Ancient Pottery," published in 1905, still remains the best book in English on the subject of Greek vases, says that the prototype of the "Nolan" amphoræ is to be found in the red-bodied amphora shape of the black-figured technique (Fig. 92); but there is no need of going so far afield when in this class of black-figured vases we have almost the identical shape.

As has been said before, this is only a brief résumé of a more elaborate study that the writer has been making of the vases of this shape, and which he hopes to publish elsewhere soon. He could not resist writing a brief account of this vase in the Museum as an introduction to the article to appear later.

S. B. L.

FOUR COVERED BOWLS FROM ORVIETO

MENTION has frequently been made in the pages of this JOURNAL of the fragments of Greek vases, which were found in tombs in Orvieto, and were acquired in 1897 by the Museum. It was a fortunate circumstance that these fragments never passed through the dextrous hands of restorers, but reached the Museum in just the condition in which they were taken from the earth. It was less fortunate, however, that the tombs were not carefully enough cleared by the local excavators to insure the preservation of all the smaller fragments. A careful knifing out of corners and crevices and a persistent use of the sieve would doubtless have made it possible to set up these vases in their entirety, with no parts missing; whereas, as a matter of fact, of the twenty-five or more vases which have been restored from these fragments, no one is entirely complete. Yet, in spite of the missing parts, these Attic fragments are to be regarded as one of the most valuable acquisitions to the Mediterranean section of the Museum. Many of the vases restored from them have already been published, but the treasure is still far from being exhausted. In this brief article it is proposed to treat of a series of black-figured covered bowls, which date from the latter part of the sixth century B. C., from the period when Athenian art was flourishing under the enlightened patronage of the Peisistratids.

For two reasons these bowls are worthy of attention. In the first place, the shape is rare; and in the second place, the scene painted on one of them represents a conclave of deities which presents features entirely new.

This shape of bowl is not recorded in the catalogs of either the Berlin or London collections. In the Louvre catalog (F. 149 and 150) M. Pottier has described two "goblets in the form of a chalice," which are of this type, and in Florence is a similar fragmentary bowl, which bears the signature of Nikosthenes.

This type of vase then is exceedingly rare, so that it is extraordinary that so many examples of this shape should have been recovered from the Orvieto tombs. Four specimens of these bowls, together with their lids, were capable of restoration, and there were



FIG. 94.—A covered bowl from Orvieto.

also found fragments from several other similar lids, so that the original number of bowls deposited in these tombs was probably greater. The Florence bowl (recently published in Perrot and Chipiez's *Histoire de l'art*, Vol. X, p. 261, Fig. 165) is called a pyxis, but the shape seems too large to have served as a toilet box, and is rather adapted to holding sweetmeats or dried fruits.

The matching of these bowls with their lids is somewhat conjectural, but since no two Greek vases are exactly alike, there are small differences in the width of purple bands, in the thickness of the black varnish, in the spacing of the decorative patterns, that indicate which pieces belonged together.

The most complete of these bowls (Fig. 94) measures, together with the lid, .216 m. in height, and .17 m. in greatest diameter. Its shape is typical. The rim is provided with a narrow ledge for holding the lid, the bowl slopes with a firm and graceful curve toward



FIG. 95.—Dancing Mænads and Satyrs from a bowl from Orvieto.

the stem, a moulded ridge separates the stem from the bowl. The lid is surmounted with a shapely knob. A slight variation from this shape is to be noted in the case of another vase, where a second moulded ridge serves to mark the lower margin of the main field of decoration.

The painted decoration of these vases is carried out in the technique that was universally employed by Attic potters in the latter part of the sixth century B. C. The figures of the painted friezes are done in black against the ground of the clay. Details are added in purple and white to give a gay effect. The undecorated portions above and below the friezes are painted solidly black, except in one case where a delicate ray pattern in relief lines takes the place of the more sombre black. The ridge below this frieze is further decorated with a band of ivy pattern. The purple and white colors have now largely disappeared. Purple was applied in bands to emphasize the horizontal divisions of the vase and to

brighten dark surfaces. But more especially it was used within the painted design for rendering details such as stripes of garments, beards of men, the eyes of women, and fillets in the hair. White paint, very thick, is used for the flesh of women, for embroidered patterns of costumes, and other details. Incised lines cut through



FIG. 96.—Cover of a bowl from Orvieto.

the decoration into the clay itself are employed to outline muscles, folds of garments and other lines which fall within the contours of the figures.

The subjects of the decoration of the bowls (Figs. 94 and 95) are those most frequently employed by artists of the black-figured style, the one a series of draped youths and maidens conversing, the other,

a dance of *mænads* and satyrs. The lids are ornamented with horsemen, warriors and athletes (Figs. 96 and 97). The drawing, though lively, is careless in details; hands and feet are excessively long; the crowns of the heads are abnormally small; liberties are taken with eyes and noses. These peculiarities, as well as the general style of small and over animated figures and the choice of subjects, are characteristic of the atelier of Nikosthenes, who himself a potter, employed artists of varying abilities to decorate his vases. Especially striking is the resemblance of the galloping horsemen of Fig. 96 to those depicted on a narrow frieze of an amphora signed by Nikosthenes, in the Louvre. (*Wiener Vorlegeblätter*, 1890–1891, Pl. III, 2, c & f.) The association of these bowls with the work of Nikosthenes is thus supported by arguments of style as well as by the fact that Nikosthenes employed this unusual shape of covered bowl.

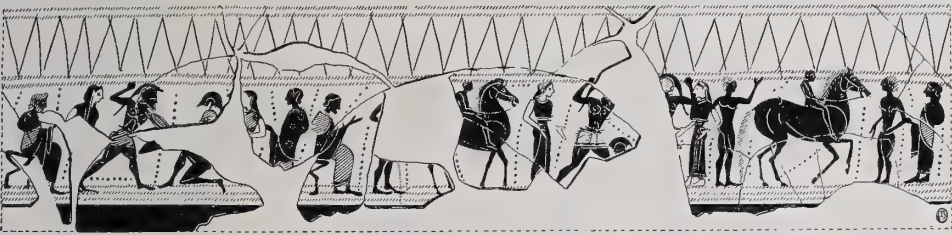


FIG. 97.—Painting on a cover of a bowl from Orvieto.

But far more interesting than these draped and dancing figures is the painted scene of Fig. 98. At a glance it is apparent that we are here in the presence of deities. The attitudes of the seated goddesses, who turn with animated gesture to the gods behind them, recall those of the seated gods who adorn the Siphnian treasury at Delphi. The scene is, therefore, of paramount interest, for it is only through vase-paintings like this that an idea can be gained of the early mural decorations and sculptured friezes of deities from which the Delphi frieze, and indeed, the pediments of the Parthenon, were eventually evolved. The majority of the figures are seated on box-like stools, only one stool with legs appearing to the left. The standing figures are the principal actors of the scene and toward them the looks and animated gestures of the others appear to be directed. The attention of the assemblage converges toward two points—the two standing figures, fourth and fifth from the left and

the running figure on the extreme right. Here apparently the artist intends to give the clue to the story he is depicting. The despatch of the runner on the right indicates a stirring event of some importance. The upraised hands of the goddesses also bespeak excitement.

In vases representing conclaves of deities, the two events which are usually depicted are the Birth of Athena and the introduction of Herakles to the circle of deities. The Birth of Athena is variously treated; sometimes Zeus is seated in the throes of childbirth, but no Athena is in sight; again she is a tiny figure in the act of springing from his head, or, larger grown, she stands on his knee; or lastly, full grown, she takes her place beside Zeus and is welcomed by the other Olympians. The last three types are not represented, obviously, on this vase, since no Athena appears. But it is possible



FIG. 98.—Scene painted on a bowl from Orvieto.

that the author intends to represent the moment before birth. In that case, the seated figure beside Ares in the center would be Zeus and the two goddesses before him, the Eilythiæ, or goddesses of childbirth. The despatch of the messenger on the right is, according to this explanation, somewhat premature. We have also to explain the absence of Hephaistos, who clove the head of Zeus open. Herakles is frequently depicted as present at Athena's birth, and as a newcomer among the gods it is perhaps natural that he should not be seated. The presence of Niké or Iris is entirely appropriate to the scene.

The other event commonly depicted in conclaves of deities, the introduction of Herakles to Olympus, is a less likely interpretation of the scene depicted here. For, although Herakles occupies a central position (fifth from the left), and stands next to Iris or Niké, he is

unaccompanied by his patron goddess Athena, who invariably presents him to Zeus and the other gods.

The scene is the more interesting because it does not conform closely to conventional types. If an explanation can be found which suits the figures exactly, it will add to our knowledge of the repertoire of early vase painters, and in the meantime the vase at least affords a new arrangement of a frieze of seated deities.

E. H. D.

SUCANEB

IN the last MUSEUM JOURNAL were printed some myths related by the Kekchi Indians of Guatemala. They are a branch of the Mayas who in ancient times lived in cities, of which the ruins excite the wonder and admiration of travelers in Central America and Yucatan today.

These ancient and very cultivated Mayas divided the year into 18 months of 20 days each, and since 5 days more were required to make the year complete they tucked these 5 days away at the end of the year and counted them in their calendar as one short month which they called Uayeb or Uyab Haab, which means the chamber of the year, because it suited their fancy to suppose that the year took its rest on these days. For reasons which we do not know these five days were popularly called U Yail kin, which means the unlucky days. Now according to very good evidence the Maya year began on a day 1 Pop and this day corresponds to July 16th of our calendar. The unlucky days therefore would be from the 11th to the 15th of July.

It would appear as if the various branches of the Mayas, or at least some of them, when they became Christian and gave up counting time by their own calendar, transferred the name unlucky from the days of Uayeb Haab to the last three days of Holy Week. It is not unlikely that this change was suggested or at least encouraged by the padres.

The Kekchi at the present day call the last three days of Holy Week Eb li rail cutan, which means the days of misfortune, the unlucky days.

To the Kekchi every mountain is either male or female and Sucanab is a female mountain in their country. Many leagues away from her stands the mountain called San Gil, her husband. The two are in constant communication with each other. Apparently the relations between "Old Mistress Sucanab" and San Gil are not altogether happy, for the Kekchi know that she sometimes feels greatly provoked by her husband's conduct and threatens that some day she will pour out fire and smoke over the whole land in an excess of anger.



FIG. 99.—A Guatemala Indian girl in her native costume.



FIG. 100.—Indian women of Guatemala.

At the feet of Sucaneb lies a beautiful lake, the surface of which is strangely smooth and placid. If you have courage enough to go on the last of Eb li rail cutan, the sad days, and sit by this lake you will witness a most extraordinary thing. A great serpent of glittering gold with long golden mane rises to the surface and after disporting himself for a time coils himself up on the water and raising his head high in the air emits a shrill whistle. In answer to that call comes a wonderfully beautiful maiden with flowing hair, eyes like stars and the face of an angel. She sings in such an enchanting voice that unless you are an unusual person you throw yourself into her outstretched arms. The maiden gives you one look of great pity and promptly delivers you up to the golden serpent.

Deep down in the lake under the mountain is a cave. In that cave is a wonderful treasure guarded by a giant, to whose service the golden serpent and the lovely maiden are committed. When these two have performed their part together in the way just described, the great serpent dives with you until he reaches this cave, where he delivers you up to the giant who guards the treasure, from whom there is no escape.

If you should prove to have enough self-control to resist the beauty of the maiden or remain impassive to her wonderful singing, you may go your way and return home, but there is no special reward in store for you. On the other hand, you will have seen a very wonderful thing.

What is the secret treasure that lies in the cave guarded forever by the giant? No one knows for certain. Some say that it consists of priceless gems. Others say that it is a charm that has power to cure all human ills. Still others say that this treasure is Human Happiness.

NOTES

Dr. Stephen B. Luce, Jr., has been appointed Assistant Curator in the Græco-Roman Section of the Museum. Dr. Luce returned in July from Athens, where he had been at work under the auspices of the American School at its excavations at Corinth.

Dr. William C. Farabee, Curator of the American Section, successfully completed a trip to the head villages of the Mundurucu Indians which occupy a plain between the Tapajos and the Xingu Rivers. Returning to Para from this trip, he devoted several months to excavations on the Island of Marajo.

Mr. C. W. Bishop, Assistant Curator in the Section of General Ethnology, who has been in Japan and China since January, 1915, in the interest of the Museum, has completed his preparations for a piece of exploration in the province of Sze-chuan.

Mr. H. U. Hall, who has been connected with the Section of General Ethnology since 1914 and who was a member of the Siberian Expedition, has returned safely to London with the collections. The difficulties and delays caused by the war protracted the work of the expedition which, however, was successful in bringing out all the collections that were obtained. Mr. Hall will bring the collections to the Museum early in 1916.

Mr. Clarence S. Fisher, Curator of the Egyptian Section and in charge of the Eckley B. Coxe Jr. Expedition to Egypt, has secured a concession to excavate the site of Dendereh. As Dendereh is a dry site, it is Mr. Fisher's intention to conduct excavations there during the winter months when Memphis, where the other concession of the Museum was obtained, is under water.

Mr. Louis Shotridge, who for some years has been connected with the American Section of the Museum, is spending the winter in Alaska among his own people, the Chilkats, and their neighbors. Mr. Shotridge is making a record of the ceremonial songs and dances of the tribes of Southern Alaska.

The following gifts have been received.

A Mexican clay idol from Oaxaca from Dr. William Pepper.

Birchbark ornaments of the American Indians from Miss Winnie H. Phillips.

An embroidered coat, a pair of Indian moccasins and a stone axe from Miss Fannie Wayne Clark.

A piece of Peruvian textile from Dr. L. S. Rowe.

A tile from Nanking, China, from Mr. Lloyd Meller Smith.

A Chinese compass from Dr. Mary W. Griscom.

A Japanese raincoat and hat from Mrs. Whillden Foster.

A catalogue of Some Works of Art Belonging to Edward Tuck presented by Mr. Edward Tuck.

Preparations are under way for the installation of an exhibition of Oriental art in the Charles Custis Harrison Hall. In anticipation of this installation the Museum has, since 1913, from time to time, been making purchases of Chinese porcelains, bronzes, pottery and sculpture, jades and paintings. In addition to the very extensive collections assembled in this way, arrangements have been made to receive on loan and include in the exhibition, a number of important objects and collections. Among these is an extensive series of the Morgan Collection of Chinese Porcelains recently in the Metropolitan Museum, which will be placed here through the generous co-operation of the present owners, Duveen Brothers.

The following programs for Wednesday and Saturday lecture courses at the Museum have been issued.

SATURDAY COURSE.

December 4. James Barnes, *The Wild Life of Africa*. A remarkable expedition into the heart of Africa, led by the distinguished journalist, author and traveler, James Barnes, marks an epoch in modern exploration. The motion pictures brought out by this expedition show the wild tribes and the animals of the African forest at home and give a most intimate view of the jungle folk.

December 11. C. William Beebe, *Travels in Tibet and other Parts of the Far East*. The personal impressions of a naturalist among primitive peoples of the Far East. Illustrated by the stereopticon.

- December 18. Roy Chapman Andrews, *The Water Mammals of the Far North*. Mr. Andrews made an expedition under the auspices of the United States Government on a whaling ship into Bering Sea and the Arctic Ocean for the purpose of studying the habits of the whale, the walrus and the seal. The motion pictures tell the story of the home life of these inhabitants of the northern seas and of the Eskimo who live by hunting them.
- January 8. Carl E. Akeley, *Glimpses of African Wild Life*. Mr. Akeley's expedition which went out to study animal life obtained remarkable results with regard to the human inhabitants as well as the wild beasts. The motion pictures present vivid glimpses of life in the jungle as seen by the naturalist and ethnologist.
- January 15. Roy Chapman Andrews, *Japan*. During his varied experiences as a scientific investigator, Mr. Andrews spent a year and a half in Japan, where he visited every portion of the empire. Beautiful motion pictures accompany his personal narrative.
- January 22. James Chapin, *A Naturalist in Central Africa*. Though not an ethnologist, Mr. Chapin lived for six years in close communication with the natives of Central Africa during his zoological investigations for the American Museum of Natural History. Very few men have enjoyed so good an opportunity of becoming familiar with the many phases of native African life as this well-known young naturalist. Illustrated by the stereopticon.
- January 29. Charles W. Furlong, *Brazil, the Land of the Southern Cross*. Mr. Furlong is an artist as well as a traveler and explorer with a gift for keeping his audience in close and sympathetic touch with the people and scenes which he describes. Illustrated by the stereopticon.
- February 5. George A. Dorsey, *An Anthropologist in China*. Dr. Dorsey, until recently head Curator of Anthropology in the Field Museum of Natural History, made a journey through China and India with the object of obtaining motion pictures of various aspects of the life of the inhabitants. His wide experience as a traveler and student of primitive peoples and of human culture gave him exceptional qualifications for such an undertaking. Dr. Dorsey's reputation as a lecturer and as an authority on ethnology is well known.

- February 12. George A. Dorsey, *An Anthropologist in India*. After completing his journey in China, Dr. Dorsey traveled through India with the same object in view. The remarkable series of motion pictures and characteristic descriptions of native life which he obtained in India are as interesting as those which he obtained in China.
- February 19. Will Hutchins, *The Greek Classic Theatre*. Mr. Hutchins brings to the lecture platform the experience of a stage manager, playwright and actor. In this lecture, as a student of the history of the stage, he traces with clearness and enthusiasm the origin of the Greek theatre and its influence on the modern stage. Illustrated by the stereopticon.
- February 26. George Byron Gordon, *The University Museum: Its Uses and Opportunities*. Illustrated by the stereopticon.
- March 4. John Getz, *The J. Pierpont Morgan Collection of Chinese Porcelains*. In this lecture a lifelong student of Chinese porcelains, possessing an intimate acquaintance with the great Morgan collection now on deposit in the Museum, will describe some of the most noteworthy features of this collection with special reference to the history of Chinese porcelain as illustrated in the Morgan collection. Illustrated by the stereopticon and by examples.
- March 11. Wm. Curtis Farabee, *The Amazon Expedition of the University Museum*. The newspapers of America and Europe have given some intimation of Dr. Farabee's explorations in the great valley of the Amazon and its tributaries during the last three years and his discovery of new tribes of men. The real experiences of this fearless explorer, however, have never yet been told. The work of the Amazon expedition stands as one of the most remarkable and valuable pieces of modern exploration. Illustrated by the stereopticon.
- March 18. Fay Cooper Cole, *An Ethnologist in Japan*. Dr. Cole has for years been a close student of conditions in the Orient. He has made four visits to Japan to study the economic and social forces which have enabled the Japanese to realize one of the most remarkable civilizations that the world has seen. Illustrated by motion pictures.
- March 25. Fay Cooper Cole, *The Wild Tribes of the Philippines*. Dr. Cole spent five years in the Philippine Islands under the auspices of the Field Museum of Natural History for

the express purpose of studying the wild tribes in their native environment. During that time he visited many peoples and met with many unusual experiences. Illustrated by motion pictures.

TEACHERS' COURSE.

- December 15. Dr. Stephen B. Luce, Jr., The American School at Athens. Dr. Luce, Assistant Curator of the Mediterranean Section of the University Museum, has recently returned from Athens where he had been engaged during the last year in Archæological excavations on behalf of the American School. In this lecture Dr. Luce will give an account of the recent discoveries made by the American School at Corinth and he will also tell how these investigations in Greece are being affected by present political conditions. Illustrated by the stereopticon.
- January 5. Edgar Thomson Shields, of Yarchow, West China, In Unknown China. The varied experience of a missionary during six years' travel and residence in the far interior of China. Illustrated by colored lantern slides.
- January 12. Theodoor de Booy, of the Heye Museum, New York, Margarita Island. Travel and exploration in a little-known part of South America. Illustrated by stereopticon.
- January 19. Herbert J. Spinden, of the American Museum of Natural History, Ruined Cities in Peten, Guatemala. Personal explorations among the scenes of an ancient and extinct civilization in Central America. Illustrated by the stereopticon.
- January 26. Alanson Skinner, By Canoe to Hudson Bay. Dr. Skinner has made many expeditions in Canada in quest of Indian lore. In this lecture he relates his adventures among the Indians of the northern forests. Illustrated by the stereopticon.
- February 2. Charles Upson Clark, Travels in Spain. Prof. Clark's lectures on Spain, ancient and modern, have become well known throughout the country. No lecturer of the present day is able to present his subject in a clearer and more attractive way than Prof. Clark. In this lecture Prof. Clark takes one through Catalonia, Aragon, Old Castile and Leon, Madrid, Cordova and Granada with the Alhambra. In

Andalusia we are introduced to the life of the Roman and the Moor and in modern Madrid we are introduced to the bull fight. Illustrated by the stereopticon.

February 9. Frederick Monsen, The Indians of the Painted Desert. Mr. Monsen's wonderful colored lantern slides of the Indians that inhabit the great southwestern portion of the United States have never been surpassed for picturesque charm.

February 16. Stephen B. Luce, Jr., The Ancient Greek Potter and His Art. The Greek potter achieved greater refinement and perfection in the shapes which he moulded from clay than any who came before or after. The painter who collaborated with him used in a wonderful way the surfaces of his vases for painting his interpretations of Greek life and ideals. These vase paintings form the best record of Greek life and manners that has come down to us. Illustrated by the stereopticon.

February 23. Walton Brooks McDaniel, The Life of a Roman Woman. An entertaining and instructive sketch of the position of woman in the domestic, social and civic life of ancient Rome, with many illustrations taken from Roman sculpture and painting.

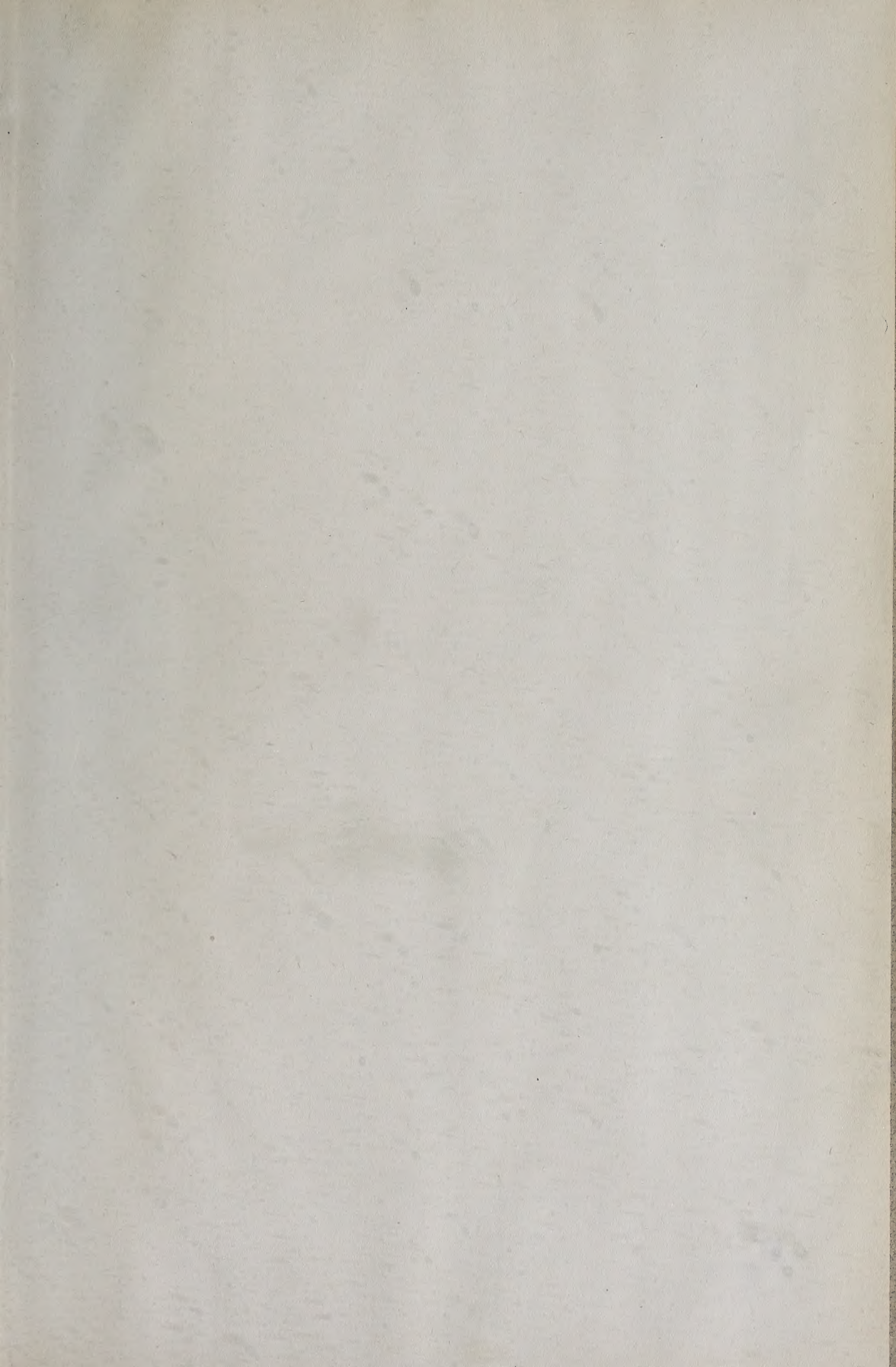
March 1. Mrs. Joseph M. Dohan, The Earliest Civilization of Greece. Mrs. Dohan (Dr. Edith H. Hall) is one of the ablest scholars in the field of prehistoric Greece. By excavations which she conducted for the University Museum during several years in Crete she has made substantial contributions to our knowledge of Greek civilization. Illustrated by the stereopticon.

March 8. John Getz, Some of the Gems in the Morgan Collection of Chinese Porcelains. In this lecture, Mr. Getz, the well-known authority on Chinese porcelains, will explain the qualities of form and color that have made famous some of the vases in the Morgan collection now deposited in the Museum. Illustrated by the stereopticon and by examples.

March 15. Alfred M. Collins, Across South America. Narrative of the Collins-Day South American Expedition. The members of this expedition traveled from Mollendo on the coast of Peru to Para at the mouth of the Amazon, During this journey they collected valuable ethnological material which they generously presented to the Museum. They also made photographs to show the country and the Indian inhabitants. Illustrated by the stereopticon.

March 22. Albert T. Clay, Recent Revelations from Ancient Babylonia. A great deal has been said recently in the public press about discoveries of ancient tablets in the Sumerian language throwing light on the oldest traditions of Babylonia. Dr. Clay, a close student of Babylonian history, will discuss in this lecture the bearing of these discoveries on history and theology. Illustrated by the stereopticon.

Since the Saturday afternoon lecture program was printed and distributed, letters have been received from Dr. Farabee which make it clear that he will not be able to return to this country in March of this year according to original calculations. In order to complete his work in bringing the collections he will remain in the field several months longer. For this reason the lecture announced for Dr. Farabee on March 11th will be omitted and another lecture will be substituted and duly announced.



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